# **Q2-2019 Airport Construction Impact Report**

U.S. Core 30+ Airports3-Year Construction Outlook

System Operations Services - Performance Analysis FAA National Headquarters Washington, DC 20591

April 1, 2019 Compiled by: AJR-G5

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Disclaimer: Not for operational use. This report contains active and planned airport construction projects, which may impact airport capacity and delays. Due to the nature of airport construction, this information is constantly changing and may be postponed or canceled at any time. This report will be updated quarterly.



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BWI—Baltimore-Washington Thurgood Marshall International Airport	
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### **Construction Impact Key**

No Capacity Effect – Departures taxi delays and/or Arrivals airborne holding delays are 15 minutes or less

Reduced Capacity and Delay Impact – Departures taxi delays and/or Arrivals airborne holding delays of 16 to 45 minutes

Reduced Capacity and Greater Delay Impact – Departures taxi delays and/or Arrivals airborne holding delays greater than 45 minutes

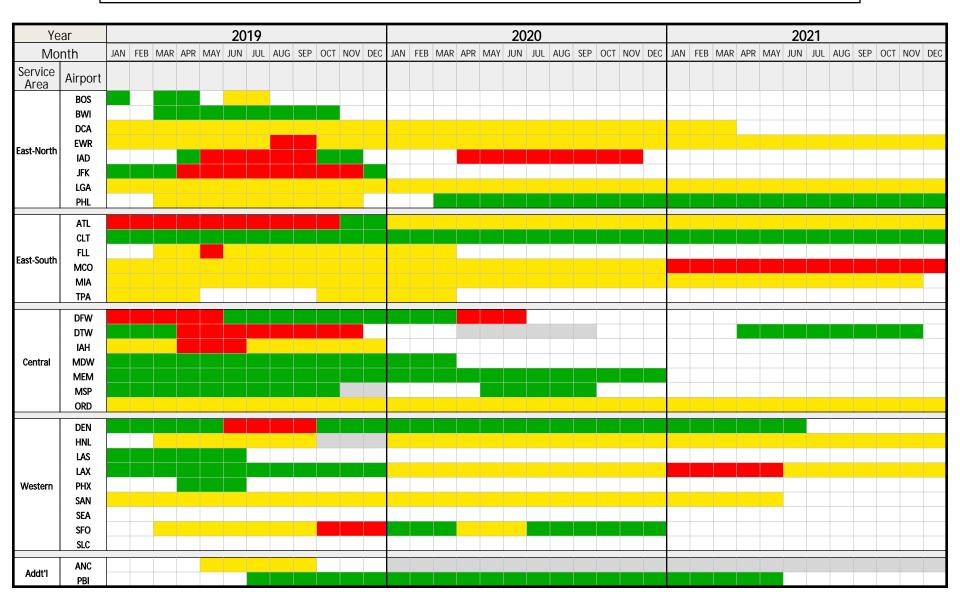
#### IATA Airport-Level Designations

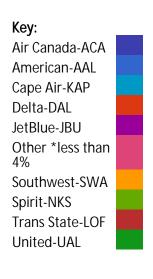
Level 1 - Airport infrastructure capacity is generally adequate to meet the demands of airport users at all times

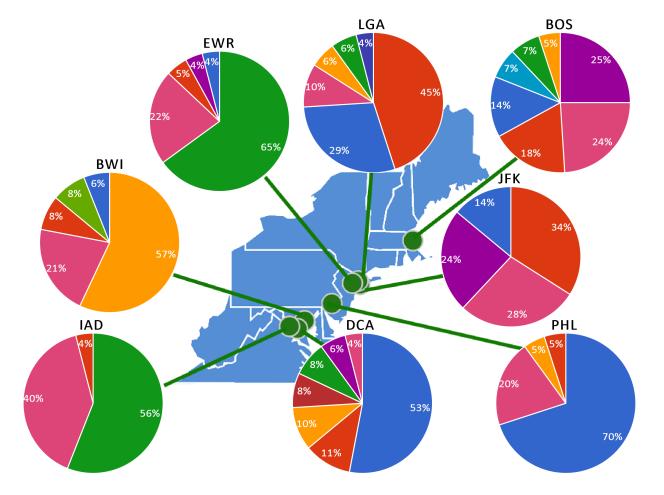
Level 2 – Airports where potential for congestion exists during some periods that can be resolved by schedule adjustments mutually agreed between the airlines and facilitator

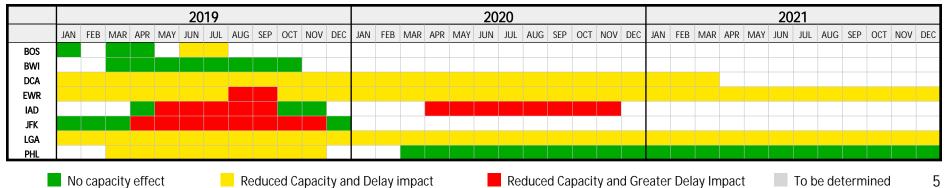
**Level 3** – Airports with full slot controls where demand for airport infrastructure significantly exceeds the capacity during certain periods and expansion of infrastructure to meet demand is not possible in the short term

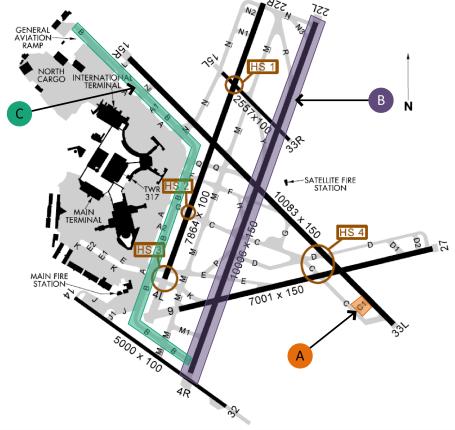
The below figure provides a broad overview of all construction with the potential to impact the NAS at the Core 30 Airports. Expanded details for each of the specific airports can be found on the following pages.





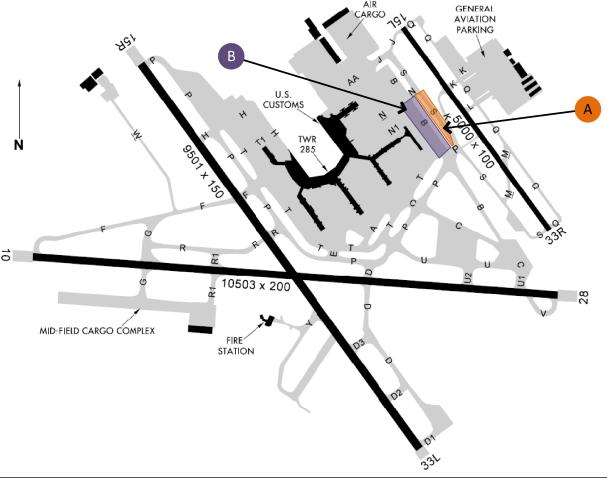






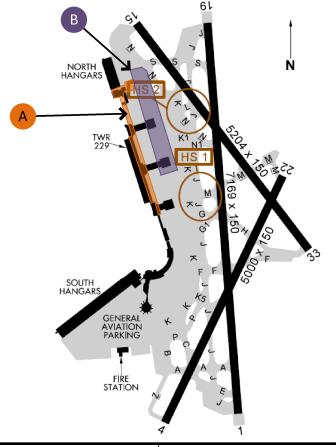
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Α	TWY C Bypass				$\perp$																																	
В	RWY 4R Lighting																																					
С	TWY B Lighting																																					

I		Project	Description of Work	Estimated Dates	Status	Impact	Notes
l	Α	TWY C Bypass	Construction of a stub/bypass taxiway near the approach end of RWY 33L.	06/01/2018 to 01/08/2019	Complete		To provide an additional access between RWY 15R/33L and TWY C.
I	В	RWY 4R Lighting	Replacing all of the risers on the lights on the RWY.	March 2019 to April 2019	In Progress		Work to be completed on the overnights, so no anticipated impact to RWY availability.
	С	TWY B Lighting	Taxiway B centerline lights replacement	June 2019 to July 2019	Upcoming		Expecting ramp and taxiway congestion.



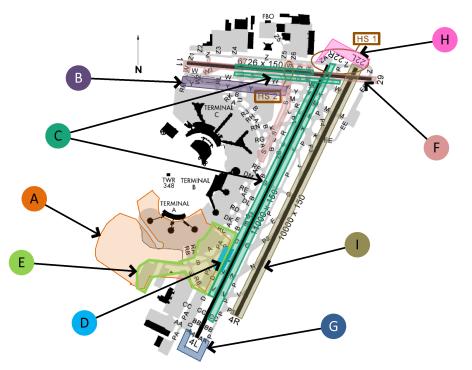
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	Project	JA	N F	EB I	MAR	APF	MA	YJL	JN JU	JL /	AUG	SEP	ОСТ	NOV	/ DEC	JAN	J FE	EB N	1AR	APR	MAY	JUN	JUL	AU	SEF	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MA	Y JUN	JUL	. AU	G SEF	OC	TNC	DV DEC
Α	TWY S						L																																	
В	TWY B																																							

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α		TWY S, between TWYs P and N, requires improvements prior to TWY B closing.	03/11/2019 to 04/30/2019	In Progress		TWY S is a parallel taxiway to TWY B that will receive all of TWY B's traffic once TWY B closes.
В	TWY B	TWY B requires resurfacing between TWYs P & N.	04/30/2019 to 10/31/2019	Upcoming		TWY B will be closed between TWYs P & N. At this time, no impact is expected. Existing talk with the airport authorities regarding dates and longevity.



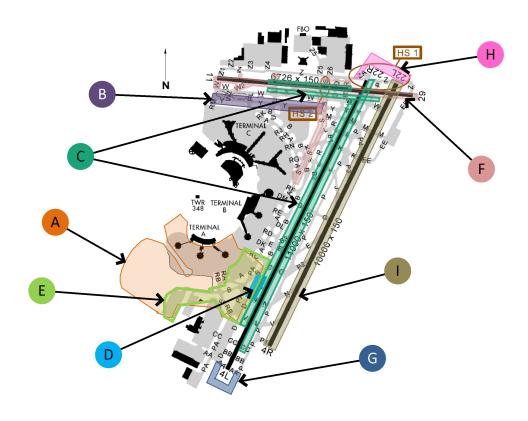
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Α	North Concourse																																							
В	Ramp Configuration																																							

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	MOLITI CONCOURSE	New regional concourse gates replacing surface gates.	04/19/2017 to 03/19/2021	In Progress	-	Safety Risk Assessment determined medium risk due to controller workload increase.  New 14 regional Jet (RJ) gates with jet bridges will allow handling of larger aircraft with 76-seats, versus current restriction of smaller aircraft with 50-seats.
В	Ramp Configuration	New ramp configuration for AAL commuters.	04/06/2019 to 2020 TBD	Upcoming		May have some impact on DCA operations. No end date at this time.



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	Project	JAN	FE	вМ	AR	APR	MA	Y JL	JN J	UL /	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MA	R AP	R M	AY JU	JN .	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Α	Terminal One																																							
В	TWYY																																							
С	RWY Status Lights																																							

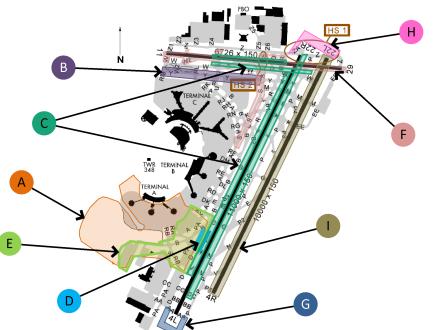
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	Terminal One	Terminal One redevelopment program. Demolition of existing Terminal A complex and construction of new Terminal One complex. Construction involves all infrastructure required to support a 33 gate terminal complex.	01/01/2018 to 06/20/2022 TBD	In Progress		Multi-phased project. Expect taxiing delays in/out due to ramp congestion.  Partial Terminal Opening, Q3-2021 (21 Gates) Full Terminal Opening, Q3-2022 (33 Gates)
В		TWY Y closed for rehabilitation. Milling and overlay asphalt between TWY RM and TWY S.	02/01/2018 to 06/20/2019	In Progress		Project work includes updating of taxiway lighting as necessary to meet current FAA standards.
С		Install Runway Status Lights (RWSL) at RWY entrances for RWY 11/29 and RWY 4L/22R.	Q1 2019 TBD to Q2 2019 TBD	In Progress		Fiber optic cable rerouting is complete. Expecting final splicing near end of March 2019.



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	Project	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAI	R APR	MA'	Y JUN	JUL	L AU	G SEF	OC.	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV D
D	TWY D																																			
Е	South TWYs & Ramp Area																																			

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
D		TWY D closed for rehabilitation. Milling and overlay asphalt between TWY N and TWY B.	01/01/2019 to 03/01/2019	Complete		Project work includes replacement of the three-inch asphalt overlay and associated electrical lighting and signage work to ensure compliance with FAA standards.
E	South TWYs & Ramp Area	Rehabilitation and paving of South TWYs and ramp areas.	April 2019 to 2021 TBD	Upcoming		Expecting ramp and taxiway congestion.

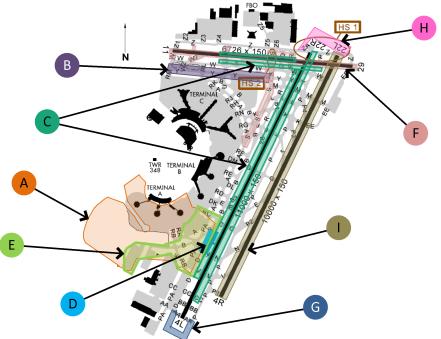
IATA Level 2



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F	RWY 11/29 & TWYs																																		

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
		STAGE 1 - RWY 11/29 rehabilitation. Crossing TWYs rehabilitation.  Lighting systems upgrade/replacement.  Taxiway renaming, airfield signage, and pavement surface sensors.	05/01/2019 to 11/23/2019	Upcoming		5/1-8/18 runway closed 10pm–1pm (15 hrs.) 8/19-9/9 runway closed continuous (21 days) 9/10-10/23 runway closed 10pm–1pm (15 hrs.) 10/11-10/13 runway grooving, 1 extended weekend (up to 18 hrs.), non-concurrent 10/24-11/23 runway closed 10pm–7am (9 hrs.)
F	RWY 11/29 & TWYs	STAGE 2 - Two 38-hour extended weekends, Fri 11pm-Sun 1pm , on 6/14 – 6/16 and 6/21 – 6/23 10-hour weekday nights, 10pm-8am, 6/16 – 6/21	06/14/2019 to 06/21/2019	Upcoming		Runway 4L/22R Shortened at TWY M Takeoff distance available (TODA) 9510 Landing distance available (LDA) 4L-6970, 22R-9510
		STAGE 3 - Two 38-hour extended weekends, Fri 11pm-Sun 1pm, on 7/12 – 7/14 and 7/19 – 7/21 10-hour weekday nights, 10pm-8am, 7/14 – 7/19	07/12/2019 to 07/21/2019	Upcoming		Runway 4R/22L Shortened at TWY M Takeoff distance available (TODA) 8165 Landing distance available (LDA) 6955
		STAGE 5 - TWY S close continuous-7 Days	07/01/2019 to 07/08/2019 TBD	Upcoming		Expecting ramp and taxiway congestion.
		STAGE 4 - TWY S closed with 11/29 for rehabilitation, lighting, and signage.	08/19/2019 to 09/09/2019	Upcoming		Closure - 21 days Expecting ramp and taxiway congestion.

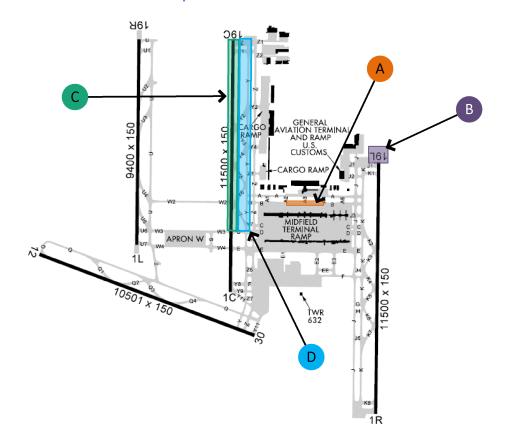
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G	RWY 4L, End-Around TWY (South End)																																				
Н	RWY 22R, End-around TWY (North End)																																				
- 1	RWY 4R/22L																																				

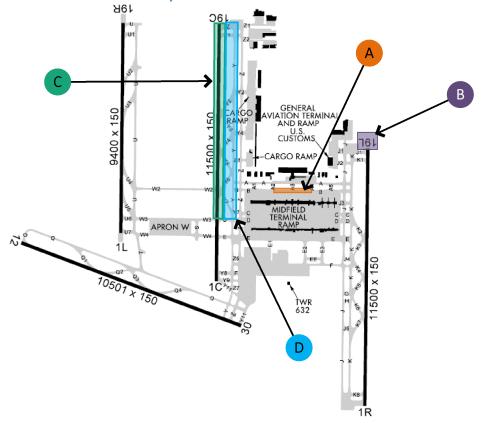
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
G	RWY 4L, End-Around TWY (South End)	Construction of a new end-around taxiway (EAT).	2020 TBD	Upcoming		Project is not in the Capital Plan. EAT would begin near TXY PA (near FedEx building) follow the perimeter of the dike and existing parking lot, and connect to TXY P between RWYs 4L and 4R.
Н		Construction of a new end-around taxiway and 470' runway extension.	2020 TBD	Upcoming		Project is not in the Capital Plan. EAT would begin near TWY Z. The runway will be extended 470' and the EAT will extend 1,500' northeast. The EAT will loop to Brewster Road to TWY Z, connecting it to RWY 22L.
1		RWY 4R/22L closed for rehabilitation. Includes milling and overlay. Will shift the RWY centerline slightly.	2021 TBD	Upcoming		

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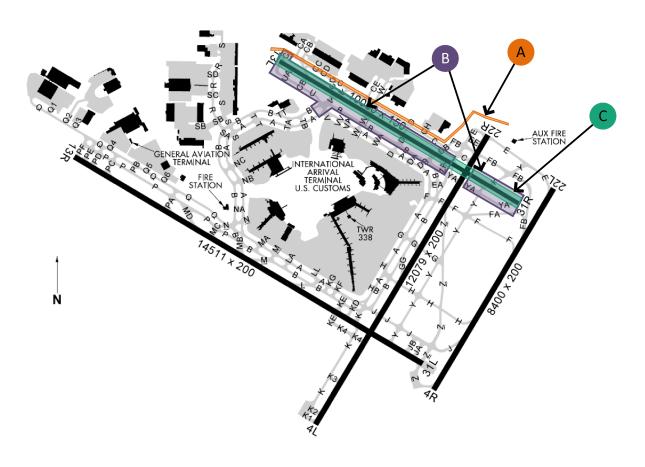
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Α	Taxilane B (Middle)																																				
В	RWY 19L ALSF-2																																				

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	Taxilane B (Middle)	Reconstruction and widening between Taxilane A2 and A4.	04/01/2019 to 11/22/2019	Upcoming		Requiring Group IV and larger aircraft to exit and enter the apron on the side of the construction that they park on, increasing taxi distance/time.
В	RWY 19L ALSF-2	Update RWY19L Approach Lighting System with Sequence Flashing Lights (ALSF-2).  Open trench work at the approach end of RWY 19L.	05/27/2019 to 09/27/2019	Upcoming		RWY1R/19L operational impacts due to work inside the RSA. Possible three-week closure at night to complete project. Possible displaced threshold. AT notified of project by Tech Ops. Current mitigation for the least amount of disruption to users.



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С	RWY 1C/19C																																		
D	TWYs Y, Y2, Y3, Y4, & Y5																																		

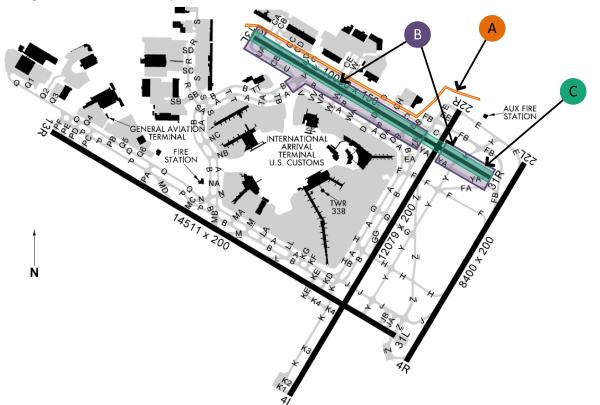
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
С	RWY 1C/19C	Reconstruction of the North section of RWY 1C/19C & High Speed TWYs Y2, Y3, Y4 & Y5, inside the Runway Safety Area (RSA).	04/06/2020 to 11/20/2020	Upcoming		Crossing TWYs W2, W3 and W4 will remain open for aircraft arriving or departing RWY 1L/19R.
D	TWYs Y, Y2, Y3, Y4, & Y5	Reconstruction & widening of TWYs Y, Y3, & Y4, outside the RSA. Reconstruction of TWYs Y2, Y3, Y4 & Y5, outside the RSA.	April 2020 to November 2020	Upcoming		Project will coincide with RWY 1C/19C construction.  Loss of capacity on RWYS 1C and 19C due to closure of first 2 high-speed exits for RWY 19C and the closure of last 2 high-speed exits for RWY 1C.  Greater in-trail spacing will be required due to the increased RWY runway occupancy time.



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Α	Electrical Duct Bank																																			

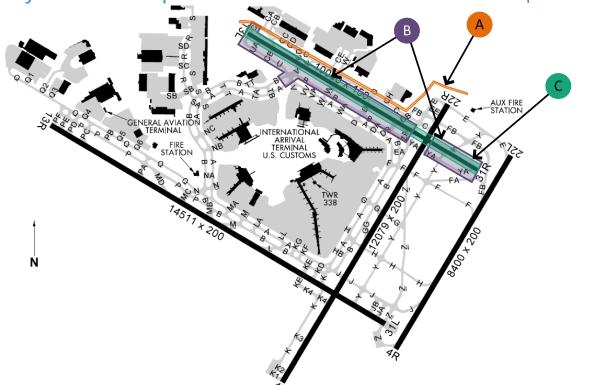
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
		Fiber Optic Telecommunication System - FOTS.				Construction ongoing. All work (Fiber and
Α			01/21/2019 to 04/01/2019 TBD	In Progress		Electronics) performed by FAA Engineering Services.
		RWY 13L/31R and TWY C using underground boring and trenching.				Expecting completion by 4/1/19.





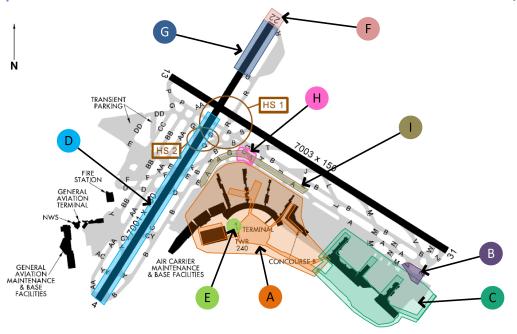
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В	RWY 13L/31R & TWYs																																	

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
В	DW/V 121 /21D 8. TW/Vc	RWY 13L/31R and closed for reconstruction and widening to 200-ft. New high-speed Taxiway. Crossing TWYs closed for rehabilitation and upgrades for Group VI aircraft.  Rehabilitation and realignment of TWY U and TWY intersection (U/V/B) for A380 operations. Reconstruction of TWY YA for future realignment. Drainage system upgrades.  Expecting RWY 13L/31R return November 16, 2019.	04/01/2019 to 11/16/2019	Upcoming		Available TWY/RWY crossings for RWY 22R departures: 4/1/19-6/20/19 - TWYS E, V, B or C (up to group IV aircraft 11:00L to 23:00L). 6/21/19-6/30/19 - TWYS E, D and DB or Y. 7/1/19-7/14/19 - TWYS Y, E, D and DB. The RWY between TWY D and E - 11:00L to 23:00L or coordinated. 7/15/19-8/24/19 - TWYS Y, E, D, DB and W. RWY between TWY W and E - 11:00L to 23:00L or coordinated. 8/25/19-11/15/19 - TWYS Y, E, D, DB, W, and V or U or U/C.



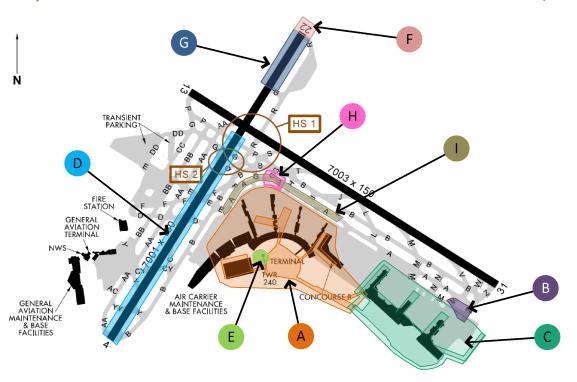
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С	RWY 13L/31R Lighting																																

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
С		Replace RWY 31R Visual Approach Slope Indicator (VASI) lights with Precision Approach Indicator (PAPI) lights. Replace RWY 31R Medium intensity Approach Lighting System (MASLR) and 13L Approach Lighting System (ALSF).  Additional lighting systems upgrade/replacement and airfield signage.	09/09/2019 to 11/15/2019	Upcoming		No outage expected for this project, just cutover.  Planning includes scheduling during RWY 13L/31R construction.
		Replacement of Lead-in Lights (Lefferts) supporting RWY 13L.	07/15/2019 to 09/13/2019	Upcoming		Design phase complete.  Outage and replacement planned during shutdown of RWY 13L/31R.
		Replacement of Lead-in Lights (Old Mill) supporting RWY 13L and RWY 13R.	11/29/2019 to 12/24/2019 TBD	Upcoming		Outage being coordinated with N90. May be completed after RWY construction or in spring 2020.



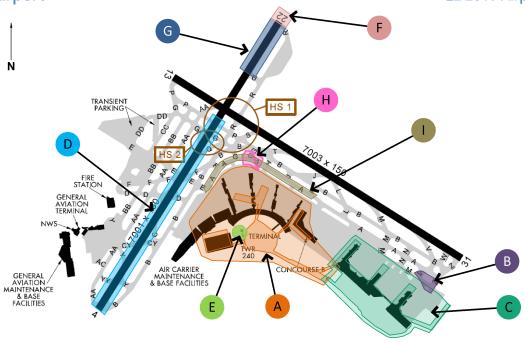
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	Project	JAN	FE	B MAF	R APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB I	MAR A	APR M	AY JUI	N JUL	AUG	SEP	OCT NOV	/ DEC
Α	Terminal B																																		
В	TWYs M & Z																																		
С	Terminals C & D																																		

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	Terminal B	Terminal B redevelopment of the Central Terminal Building (CTB). Construction expected to include the demolition of the existing terminal and associated infrastructure. Construction is for a new 35 gate terminal.	08/04/2015 to 11/07/2021	In Progress	_	The ZA ramp area is not available for use during phase 1. ZA is now decommissioned. New deicing areas have been relocated in front of the American hangars.  Terminal B; first 11 gates opened 12/2018. Gate 46 opened 3/219.
В	TWYs M & Z	New construction of terminal C. A portion of TWY M will be permanently closed in Sep 2019, the remainder of TWY M will become a non-movement area and renamed Taxilane M.	07/24/2017 to 03/19/2022	In Progress		In support of Terminal C redevelopment.
С	Terminals C & D	Terminals C & D redevelopment. Construction includes demolition of the existing terminals and reconstruction. Construction is for a 37 gate terminal.	08/01/2017 to 01/12/2027	In Progress		Construction includes new main terminal. Terminal C & D is approx. 38% of LGA passenger traffic (275 daily departures). Concourse G is planned to open in late summer 2019.



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	Project	JAN	FEE	MAI	R AP	R MA	Y JUI	N JUL	AUG	SEP	OCT NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB N	AR AP	R MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
D	RWY 4/22																																		
E	Control Tower ASDE Antenna																																		

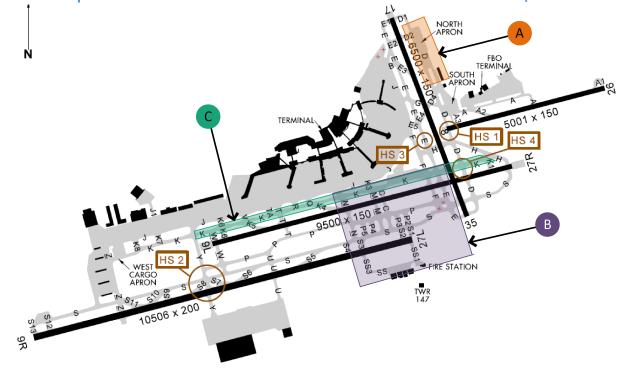
ľ		Project	Description of Work	Estimated Dates	Status	Impact	Notes
	D	RWY 4/22	RWY 4/22 closed for rehabilitation. Mill and overlay of runway deck wearing course, and concrete panel replacement.  Resurfacing RWY 4/22 from the approach end of RWY 4 to the RWY intersection. Includes all RWY crossings and exits.	04/14/2019 to 09/15/2019	Upcoming		Multi-phased project. The majority will be completed during weekend closures. The RWY closures required for this project will be scheduled during nighttime, and during scheduled weekend closures to minimize impacts. Associated TWY work will continue thru November 2020.
	E	Control Tower ASDE Antenna	Remove and replace ASDE antenna on top of tower cab. A crane will be positioned at tower to lift the Antennas.  ASDE and RWSL out of service for 1-2 days.	April 2019	Upcoming		Expecting to schedule during one weekend to minimize operational impacts.  ATC Specialists may need to evacuate tower cab during lifts on the midnight shifts.



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F	RWY 22 LDA																																
G	RWY 4/22 Deck																																
Н	TWY A Drainage																																
- 1	TWY A																																

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
F	RWY 22 LDA	RWY 22 localizer directional aid (LDA) upgrade and deck extension. New MK20A localizer.	June 2019 to August 2019	Upcoming		RWY 22 deck extension to support a more stable RWY 4 localizer signal. Expecting return to service: first week in August 2019, after flight inspection.
G	RWY 4/22 Deck	Runway 4/22 deck rehabilitation.	Jun 2019 TBD to Sep 2019 TBD	Upcoming		The resurfacing of Runway 4/22 will be completed using night and weekend closures to minimize the effect on capacity.
Н	TWY A Drainage	Taxiway A closed for installation of new 72' drain line across TWY A to the Central Terminal Building (CTB) concourse C.	September 2019 to November 2019	Upcoming		TWY A closed from TWY G to TWY H, TWY GG closed for same duration. No temporary "bypass" constructed to replace TWY A for any duration of this project.
I	TWY A	TWY A closed for rehabilitation. Resurfacing TWY A between TWY E and TWY K.	03/16/2020 to 09/30/2020	Upcoming		Project expected to bid in Dec 2019 and construction in Spring/Summer 2020.

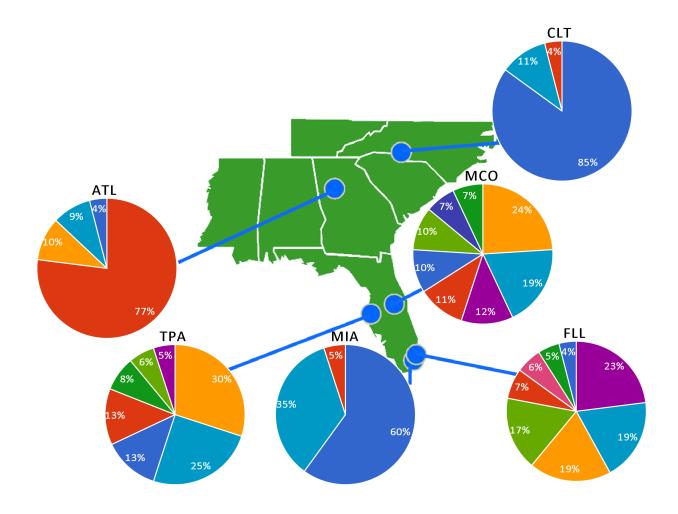


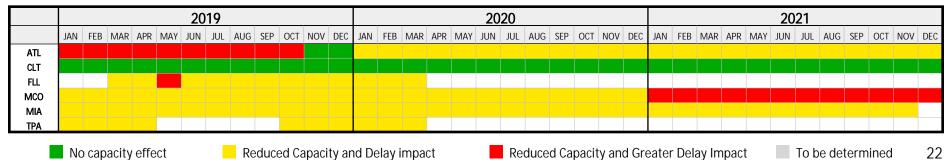


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Α	Airfield North Apron																																
В	TWYs S, E, F, & P																																
С	TWY K																																

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	Airfield North Apron	Reconstruction and rehabilitation of the North Apron and TWY D.	03/05/2019 to 11/15/2019	In Progress		Phased (2) closure on TWY D.
В	TWYs S, E, F, & P	Associated with RWY 27L extension. Includes milling and paving, storm drainage, electrical conduit, centerline lights, elevated runway guard lights (ERGL), and signage. Rehabilitation of TWYs S and E. Extension of TWY F to TWY S and extension of TWY P to TWY E. Fulldepth construction in between TWY S/F, and TWY P/E.	03/05/2019 to 06/05/2019	In Progress		Final phase of the RWY 9R/27L extension, package 3 of 3.
С	TWY K	Reconstruction of TWY K. Construction includes demolition, paving, lighting, marking, and grading.	03/15/2020 to 08/31/2024	In Progress		Potential for limited impact to adjacent TWYs.



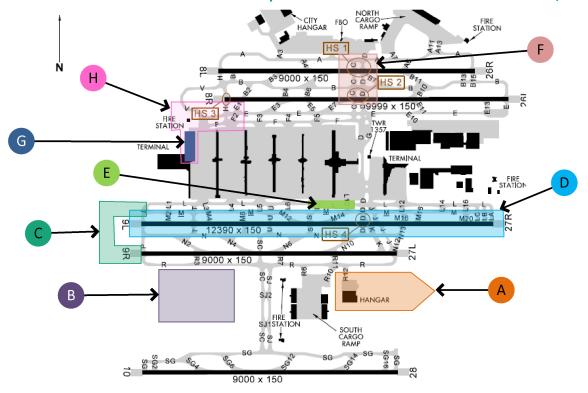




### ATL (1 of 3)—Hartsfield-Jackson Atlanta International Airport

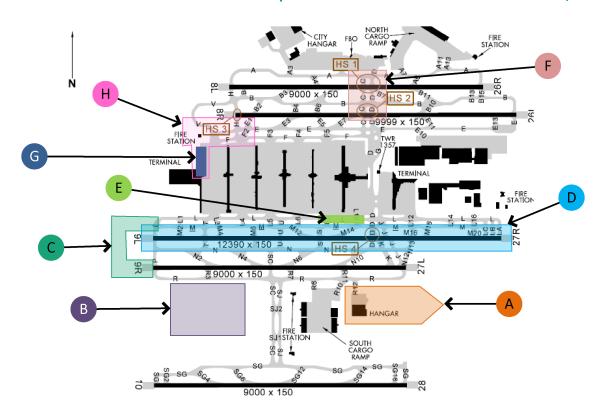
#### Q2 2019 Airport Construction Impact Report





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Α	South Cargo Expansion																																			
В	North Cargo Relocation & Expansion																																			
С	RWY 9L End-Around TWY																																			

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	South Cargo Expansion	Air cargo facilities (Building E) will be moved to this area of the complex.	06/01/2017 to 2019 TBD	In Progress		Development of Cargo Building E and supporting ramp to provide for additional cargo facility capacity for all-cargo/freighter carriers.
В	North Cargo Relocation & Expansion	Air cargo facilities (Buildings 2A & 2B) will be moved to this area of the complex.	04/01/2018 to 2020 TBD	In Progress		Cargo Buildings 2A and 2B will be constructed in 3-4 phases. Construction will require relocation of FAA West Remote Transmitter, ASOS, and Low Level Wind Shear System (LLWAS) #7 sensor.
С	RWY 9L End-Around TWY	Construction of an EAT at RWY 9L to provide more efficient capacity and reduce delays.	04/01/2018 to 11/30/2022	In Progress		Multi-phase project. Phase 1 will coincide with runway rehabilitation/reconstruction.



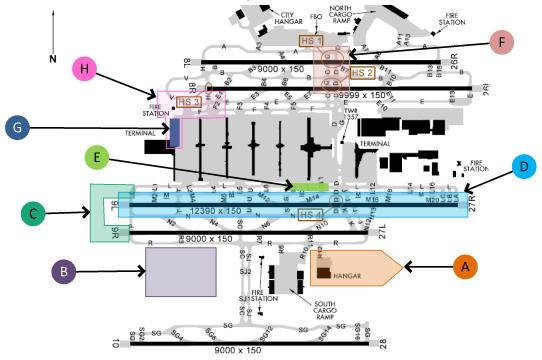
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D	RWY 9L/27R and Adjacent TWYs																																
Е	TWYL																																

I		Project	Description of Work	Estimated Dates	Status	Impact	Notes
	D	RWY 9L/27R and Adjacent TWYs	Phase 3 Construction, TWY closures for pavement rehabilitation and runway safety area (RSA) improvements.  RWY 9L PAPI OTS, 9L/27R Localizer and Glide Slope OTS, 9R Glide Slope OTS, Taxiway closure: TWY P and TWY N between P and N2. Approach end 9L.	09/24/2018 to 10/20/2019	In Progress		During this project, a 3-week, full runway closure along with temporary threshold displacement and Navigational Aid (NAVAID) outages will be necessary. This project will enable RWY 9L End-Around-TWY (EAT).
	E	TWY L	Replace TWY L between ramp 5 (South) and ramp 6 (South).	08/01/2019 to 08/30/2019	Upcoming		Will utilize alternate taxi routes during construction.

### ATL (3 of 3)—Hartsfield-Jackson Atlanta International Airport

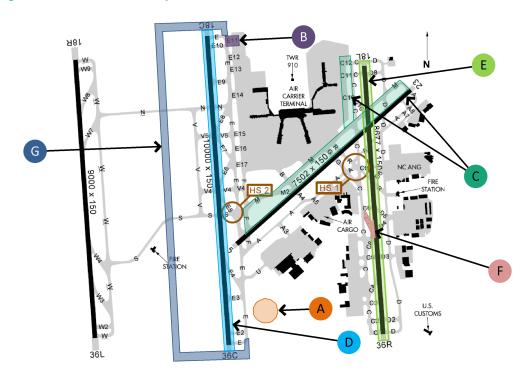
### Q2 2019 Airport Construction Impact Report





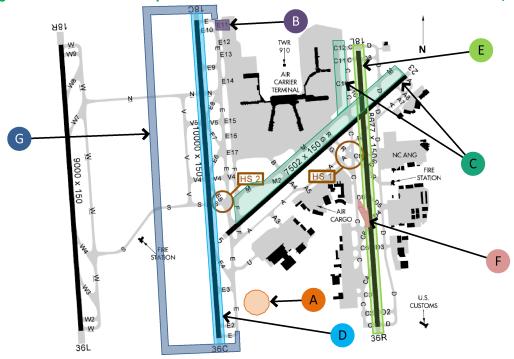
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F	Hot Spot 1 & Hot Spot 2																																															
G	Concourse T					Ι			Ι																																							
Н	Taxiway V																																															

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
F	Hot Spot 1 & Hot Spot 2	RWY Incursion Mitigation Program: RWY 8L/26R, HS1, TWY C, D, B intersections; RWY 8R/26L, HS2, TWY C, D intersections.	2020 TBD	Upcoming		RWY Incursion Mitigation Program (RIM) of HS1 and HS2. Both are located on the north airfield and require shifting of portions of TWYs C and D that intersect RWYs 8L/26R and 8R/26L at midfield. Phased project planned to minimize costs and airfield impacts.
G	Concourse T	North extension; to modify terminal parking and apron areas and construct 6 new gates to accommodate up to Aircraft Design Group (ADG) III.	09/01/2020 to Winter 2023	Upcoming		Concourse T will be extended. Construction will add 6 new gates.
Н	Taxiway V	TWY V realignment and redesign, for TWYs E, F, H, E1 and F2.	09/01/2020 to 10/31/2020	Upcoming		Preliminary work to support the construction of, and use of Concourse T expansion. 4 Phases to minimize the impact to operations.



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Α	Control Tower																																								
В	TWY E11																																								
С	TWY M																																								

		Project	Description of Work	Estimated Dates	Status	Impact	Notes
	A	Control Tower	New FAA Control Tower.	06/02/2017 to 2020 TBD	In Progress		Tower should be commissioned and operational in early-2020.
	В	TWY E11	Permanent Demolition of TWY E11.	January 2019 to February 2019	Complete		Removal of the old Taxiway E11.
	0	TIANAA	TWY M from the ramp up to TWY C closed for concrete rehabilitation	03/06/2019 to 03/29/2019	Complete		Alternate taxi routes have been established. RWY 5/23 will be used as a taxiway only during this project.
'	C	TWY M	TWY M and F closed north of runway 5/23 for rehabilitation.	04/01/2019 to 08/03/2019	Upcoming		During project, RWY 5/23 will be closed to arriving and departing aircraft. It will be used for taxiing aircraft.

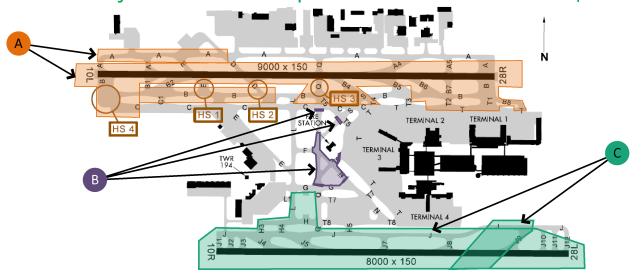


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D	RWY 18C/36C																																			
E	RWY18L/36R																																			
F	TWY C7																																			
G	New 4th Parallel RWY																																			

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
D	RWY 18C/36C	RWY 18C/36C closed for joint seal replacement.	03/11/2019 to 04/26/2019	In Progress		This project expecting during overnight hours, between 2315-0600L daily.
E	RWY18L/36R	RWY 18L/36R closed for rehabilitation.	09/01/2019 to 12/20/2019	Upcoming		This project takes place over night between 2315L- 0715L daily.
F	TWY C7	Permanent Demolition of TWY C7.	09/01/2019 to 12/20/2019	Upcoming		No operational notes.
G	New 4th Parallel RWY	Build new runway to add capacity, 12,000 ft. x 200 ft., plus end-around TWYs.	Summer 2020 to Fall 2022	Upcoming	_	Multi-phased project. Design phase 2018. Possible service interruptions due to infrastructure system tie-ins. Possible arrival/departure impacts due to equipment, and construction cranes.

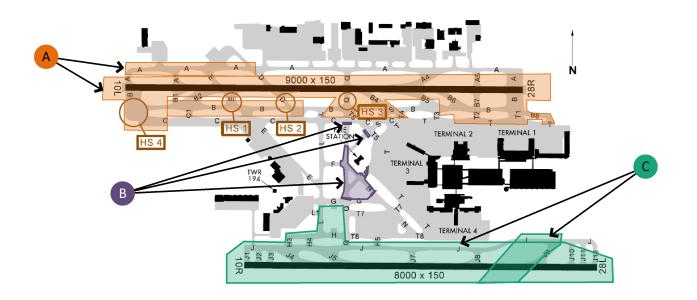
## FLL (1 of 2)—Fort Lauderdale/Hollywood International Airport

#### Q2 2019 Airport Construction Impact Report



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Α	RWY 10L/28R and TWYs																																			
В	Airfield TWYs (center)																																			

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
		Phase 2 (88 days) - TWY A rehabilitation.	03/25/2019 to 06/02/2019	In Progress	•	Construction in the Northwest cargo ramp area. There will be impact to aircraft taxiing in this area.  Additional runway crossings will be needed so departing traffic can access full length.
A	RWY 10L/28R and TWYs	Phase 3 (120 days) – RWY/EMAS rehabilitation. RWY resurface/EMAS update.	06/03/2019 to 10/03/2019	Upcoming		Single runway operation, expect reduced capacity and delays.  Expecting 28 AAR, available during both East/West operations, and changes for weather or other constraints. Arriving aircraft 16-23 min. delay during peak operations. Surface modeling complete; additional 2 ½ min. taxi-in, 7 min. taxi-out during VMC.
		Phase 4 (159 days) - TWY B rehabilitation, 10/1/19 to 3/8/20.  TWY rehabilitation, includes milling and paving. New surface markings and signage.	10/01/2019 to 03/08/2020	Upcoming		Runway open.  Expected end of construction: Sat 3/7/20.
В	Airfield TWYs (center)	Surface area closed for rehabilitation and maintenance. Area closed for 4 days, during nights and mornings 9:00PM to 10:00AM local.	Spring 2019 TBD	Upcoming		

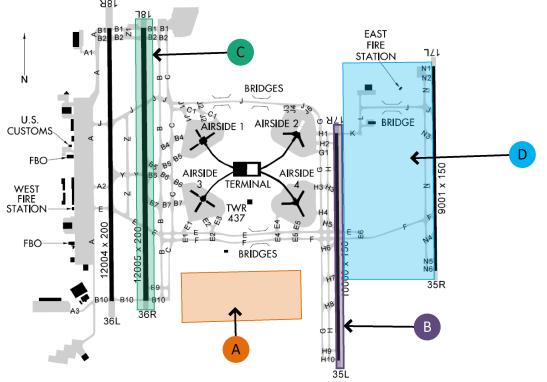


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		Project	JAN	FEE	MA	AR A	APR I	MAY	JUN	JUL	AUG	SEP	OCT NO	DEC	JAI	N FEI	ВМА	AR A	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
С	C	RWY 10R/28L																																					

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
		RWY 10R/28L and associated TWYs closed for Rehabilitation. Milling and paving RWY 10R/28L, TWYs J and H, and parts of TWYs L and Q.  Construction will consist of concrete and joint repairs, concrete crack and surface sealing, bridge structure expansion joint replacement, and pavement markings.	03/25/2019 to 04/22/2019	In Progress		Phase 1: closed daily from 2200L to 0600L. Duration: 4 weeks. System Impact Report (SIR) complete.  Runway 10R-28L will be cleared and available in 30 minutes for emergency incidents.
С	RWY 10R/28L	RWY 10R/28L and TWY J closed for RWY, TWY, and bridge structure repairs. Includes total expansion joint replacements, concrete panels, and bridge header repairs.				Notification by local authorities advised the RWY needs emergency repairs . The construction will occur in the aircraft takeoff and landing zones for RWY 28L.
		RWY 28L: two joint replacements 775' and 790' four header replacements 175', 255', 255', and 135'	05/21/2019 to 05/23/2019 TBD	Upcoming		RWY is not recallable due to concrete panel replacement, minimum 2-day cure time for concrete type being used.
		TWY J: two joint replacements 365' and 430' three header replacements 15', 105', and 25'				In the event of a weather delay, the work will be conducted the following week, 5/28/19 to 5/30/19.

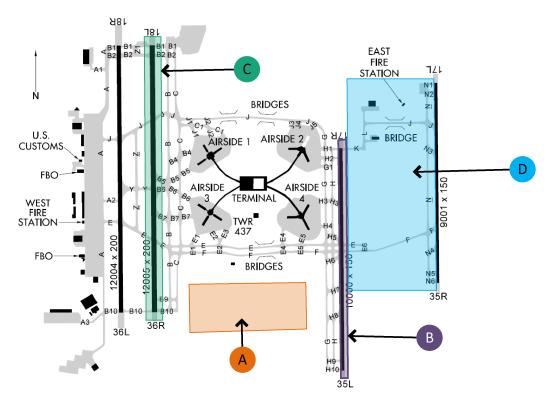
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Α	South Terminal Complex																																
В	RWY 17R/35L & TWYs																																

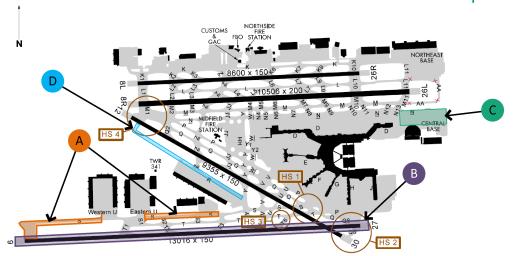
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	South Terminal Complex	Construction of a new South Terminal Complex and associated apron/taxiway. Limited RWY/TWY closures.	11/14/2017 to 2020 TBD	In Progress		Expecting some system impacts when taxiway closures are required. Work on the parking garage and intermodal train station have begun. Construction cranes may affect some arrival minimums. Construction date for beginning the south terminal for aircraft operations is still TBD.
В	RWY 17R/35L & TWYs	Rehabilitate pavement for the RWY and entrance and exit TWYs. Improvements to RWY geometry, markings, lighting, and signage. Phase 1 Taxiway (South) - 2/8/19 to 3/10/19 Phase 2 Runway - 3/10/19 to 8/7/19 (150 days) Phase 2A/2E Taxiway (Middle & North) - 3/10/19 to 8/7/19	02/08/2019 to 08/07/2019	In Progress		There may be some delay impacts due to present traffic volumes and continued growth at MCO. Coordination with TMU and users will be started prior to the start date to help mitigate any issues.



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С	RWY 18L/36R																																		
D	East-side Taxiways																																		

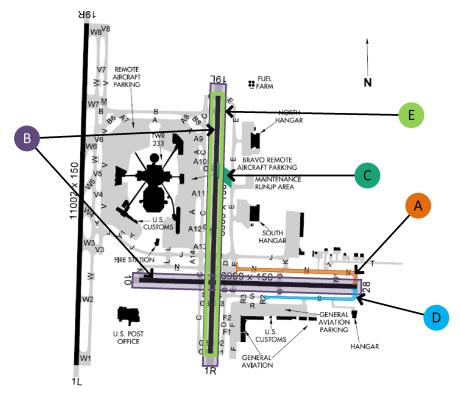
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
С	RWY 18L/36R	Rehabilitate pavement, includes mill and overlay, joint sealing and other repairs. Improvements for pavement geometry, runway shoulder pavement widening, blast pad enhancements, markings, lighting, and signage.	01/01/2020 to 2020 TBD	Upcoming		Some delay impacts expected. Loss of ILS RWY 36R could result in some delays during weather and require TMU initiatives. Advance coordination will be in place between TMU and users to help mitigate any issues. Funding has not yet been determined. Additional TWY closures expected at various phases.
D		Rehabilitate pavement, lighting, painting and signage on all taxiways between RWYs 17L and 17R.	2021 TBD to 2022 TBD	Upcoming		Still in the design phase. If long term taxiway closures are encountered capacity could be reduced due to the fact we could not access RWY 17L/35R.





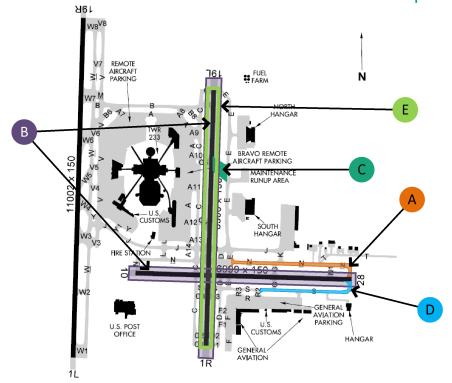
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Α	TWYs S & T																																		
В	RWY 9/27 Lighting																																		
С	Central Base Ramp																																		
D	RWY 12/30 & TWY R																																		

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
		Rehabilitation: mill and overlay, lighting upgrades, and pavement markings.  TWY S from TWY T3 and TWY S1 closed.	02/12/2018 to 03/25/2019	Complete	-	TWYs will be closed in segments to minimize potential impacts.
Α	TWYs S & T	Rehabilitation: mill and overlay, lighting upgrades, and pavement markings.  TWY S from Western U ramp and approach end of RWY 09 closed.	03/22/2019 to 04/29/2019	In Progress		TWYs will be closed in segments to minimize potential impacts.
В	RWY 9/27 Lighting	Work needs to be completed on a number of runway light fixtures.	04/01/2019 to 04/11/2019	Upcoming		Runway 9/27 is scheduled to be closed 4/1/19 – 4/4/19 from 0100Z – 1400Z then the same time frame again the following week plus an additional day if needed the week of 4/15/19 TBD.
С	Central Base Ramp	Central Base (East side) ramp expansion and taxiway tie-in.	04/15/2019 to 11/01/2021	Upcoming		Project will impact operations during taxiway tie-in work at the N-13 intersection.
D	RWY 12/30 & TWY R	Relocation and westward extension of TWY R, upgrading utilities and lighting.  RWY 12/30 full closure.	06/14/2019 to 07/12/2021	Upcoming		Expecting increased taxi times due to closures. Multi-phased plan will have taxiway closed in segments to minimize impacts. Expecting major construction work during mid-shift hours.



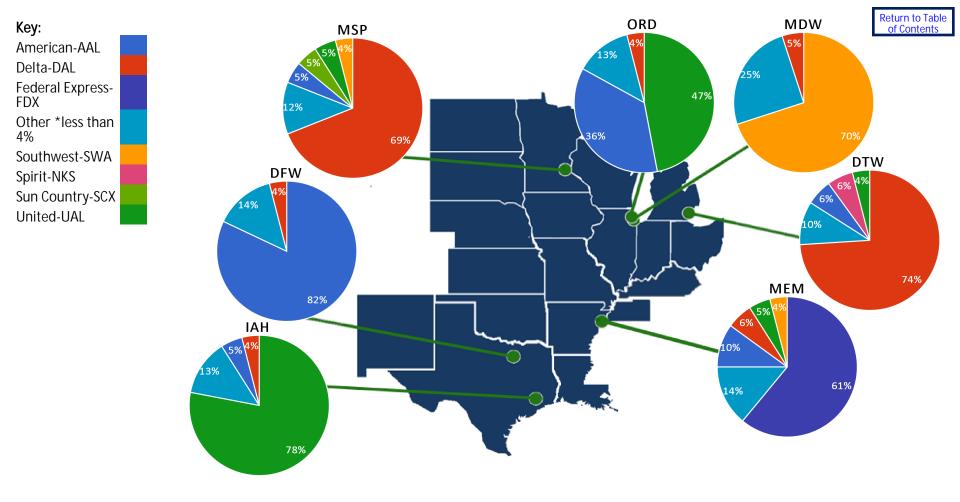
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Α	TWY N Reconstruction																																			
В	RWY 19L/1R AND RWY 10/28 and TWYs																																			
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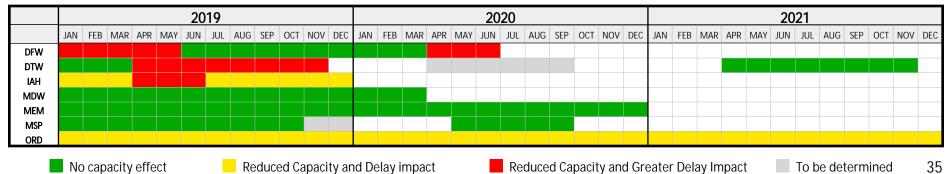
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	TWY N Reconstruction	TWY N closed from TWY E and approach end RWY 28. Reconstructing asphalt sections.	03/11/2018 to 04/15/2019	In Progress		Reconstruction project will require intermittent closures of RWY 10/28.
В	RWY 19L/1R AND RWY 10/28 and TWYs	Renaming of feeder taxiways associated with RWY 19L/1R and RWY 10/28. This will require intermittent daily closures to replace signage.	01/07/2019 to 04/15/2019	In Progress		Possible airborne holding, expanded miles-in-trail, ground stop, or ground delay program.
С	TWY U	TWY U closed between RWY 01R/19L and TWY E.	02/07/2019 to 04/30/2019	In Progress		TWY U will be closed permanently until such a time it can be reconstructed to meet new FAA runway configuration standards.



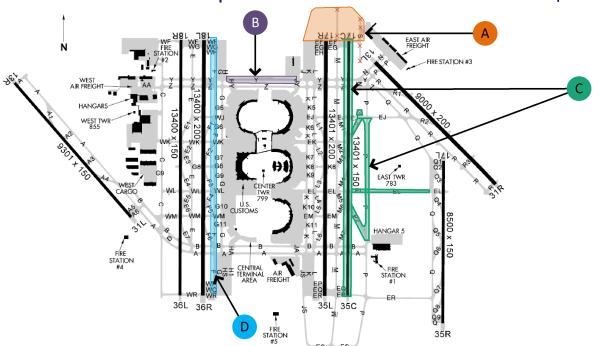
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D	TWY S Reconstruction																																
Not Depicted	Airfield Runway Threshold Lighting																																
Е	RWY 1R/19L Lights																																

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
D	TWY S Reconstruction	TWY S closed for reconstruction from TWY R2 to approach end RWY 28.  Reconstructing asphalt sections.	03/11/2019 to 04/15/2019	In Progress		Reconstruction project will require intermittent closures of RWY 10/28.
Not Depicte	Airfield Runway Threshold Lighting	Runway threshold lighting on all runways will be upgraded to meet nee FAA standards	10/01/2019 to 03/01/2020	Upcoming		This will require single day closures of each runway to complete this work. Possible airborne holding, expanded miles-in-trail, ground stop, or ground delay program.
Е	RWY 1R/19L Lights	Runway guard lights will be installed at intersections of taxiways with RWY 01R/19L.	10/01/2019 to 03/01/2020	Upcoming		This will require closures on taxiway C and may impact aircraft entering and exiting RWY 01R/19L.



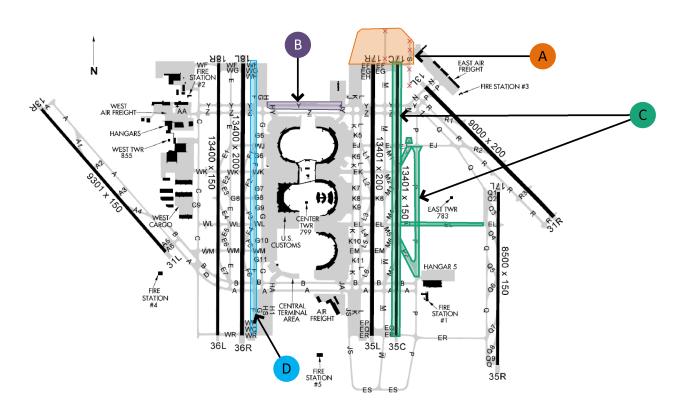


### **Q2 2019 Airport Construction Impact Report**



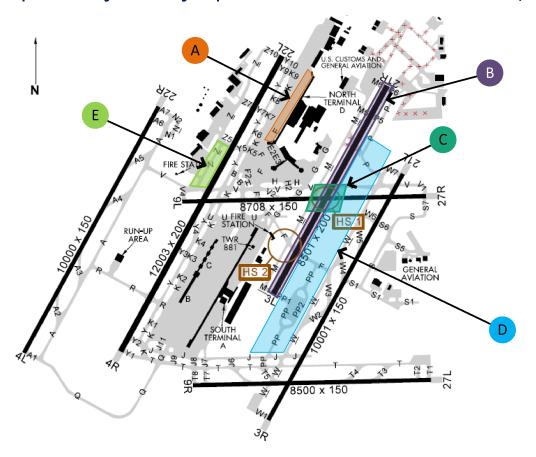
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Α	RWYs 17C-17R End-Around TWY North Section																																				
В	TWY Y																																				

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	North Costian	Northeast End-Around Taxiway (NEAT). Phase 1 & 2B-2D, and 2E: TWY P realignment will need non-simultaneous closures of TWYS Y/N and Z/P. Phase 3: Glycol facilities relocation near the approach end of RWY 17R.	05/24/2018 to 04/30/2020	In Progress		Project supports taxiway tie-ins for NEAT.  Project supports relocation of deicing fluid.
В	TWY Y	TWY Y closed between taxiways HY and JY for bridge reinforcement.  Nightly: 2300L-0600L	06/25/2018 to 05/15/2019	In Progress	•	TWY Y closure is not concurrent with any other east/west airfield connector TWY. Some aircraft that normally use the north bridge taxiways will be rerouted to use the south bridges (A&B) which will increase taxi times and congestion. Taxi in/out times will increase during this long term closure. MIT or metering for arrivals. Departure delays of 15-29 minutes possible.



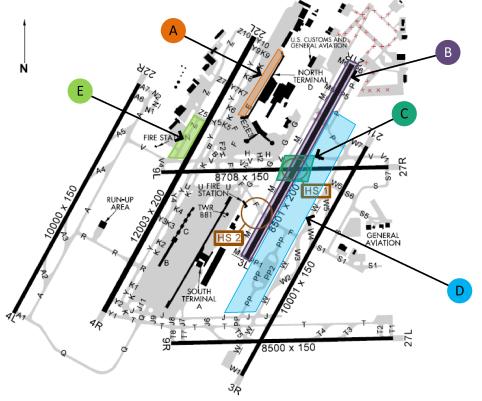
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С	RWY 17C/35C & TWYs																																		
D	TWY F																																		

I		Project	Description of Work	Estimated Dates	Status	Impact	Notes
	O	RWY 17C/35C & TWYs	RWY 17C/35C and associated TWYs closed nightly for final rehabilitation activities (11pm-6am). TWY P2 closed between RWY 17C and TWY P. TWY EL closed between RWY 17C and TWY Q. TWY P closed between TWY EJ and maintenance hangar.	03/10/2019 to 04/19/2019	In Progress		Multi-phased project.
	D	TWY F	TWY F closure. Replace and expand asphalt shoulders, replace concrete panels, expand pavement at key intersections.	Spring 2020 TBD	Upcoming		Project delayed until further notice.



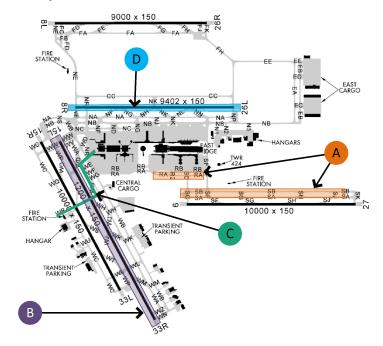
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Α	North Terminal Expansion																																	
В	RWY 3L/21R and TWY M																																	

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	North Terminal Expansion	North Terminal gate expansion (3 gates), Apron rehabilitation, and return overnight (RON) parking.	07/01/2018 to 11/15/2019 TBD	In Progress		Project is in non-movement area. Minimal impact to aircraft ground movement is expected.
В	RWY 3L/21R and TWY M	RWY 3L/21R and parallel TWY M closed for rehabilitation.	04/01/2019 to 11/15/2019	Upcoming		Runway 3L/21R is a primary departure runway. During peak arrival demand possible departure delays due to single runway departure operation.



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С	RWY 9L/27R																																						
D	TWY P & PP																																						
Е	TWY Z																																						

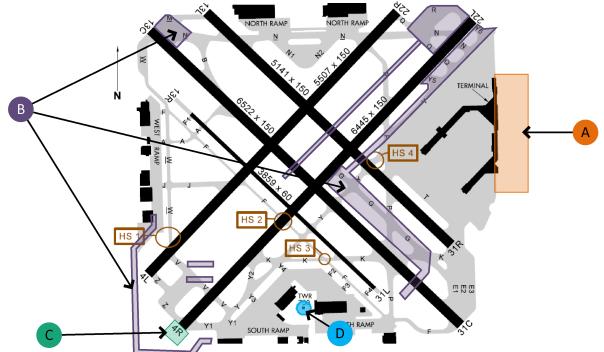
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
С		RWY 9L/27R closed for rehabilitation of intersection with RWY 3L/21R.	07/01/2019 to 09/14/2019	Upcoming		Runway 9L-27R is primary departure runway during crosswind conditions (<3% of the time). Phasing has been scheduled outside of the crosswind season to minimize potential for use.
D	TWY P & PP	TWYs will be closed for Taxiway PP and P rehabilitation. Taxiway P extension construction.	04/01/2020 to 09/16/2020	Upcoming		Multi-phased project to allow for crossings to be maintained and facilitate ground movement of aircraft from Runway 3R-21L and tenant locations.
Е	TWY Z	TWY Z relocation between TWY V and TWY Z5.	04/01/2021 to 11/15/2021	Upcoming		



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Α	TWY RA, SA, SB																																			
В	RWY 15L/33R																																			
С	Airport Sanitary Sewer Mains																																			
D	RWY 8R/26L																																			

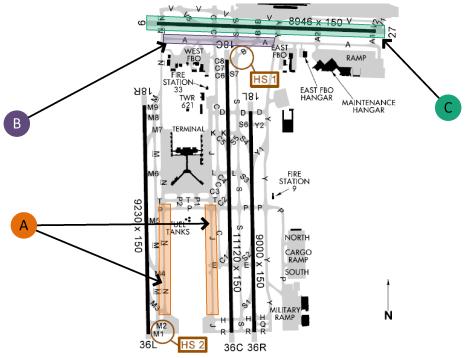
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	TWY RA, SA, SB	TWYs RA, SA, and SB (South Area) reconstruction.	03/01/2018 to 2019 TBD	In Progress		UAL Ramp control may incur internal delays getting to transfer of control point (CP).
В	RWY 15L/33R	RWY 15L/33R closed to tie in adjacent taxiways and related construction projects. Runway closed continuous and not recallable.	01/13/2019 to 04/02/2019	In Progress		12,000 ft. departure RWY is not available during this period to heavy cargo and foreign carriers. Possible airborne delays 15-45 minutes, due to airport capacity.
С	Airport Sanitary Sewer Mains	Rehabilitation of sewer line from Terminal A Southbound, then West of TWY WC.	Spring 2019 TBD to Fall 2019 TBD	Upcoming		Project delayed, estimated project duration 419 days.
D		RWY 8R/26L closed for resurfacing, and electrical upgrades.	Spring 2019 TBD	Upcoming		Expected start date: Q2-2019.





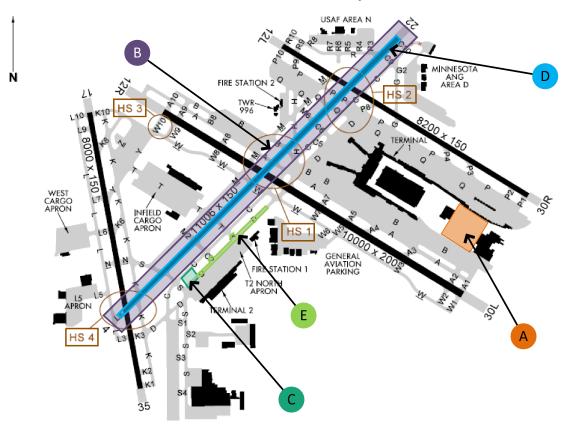
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Α	Terminal Parking Garage																																			
В	Airfield Lighting																																			
С	RWY 4R/22L EMAS																																			
D	ATCT																																			

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	Terminal Parking Garage	Expansion of the existing terminal parking structure.	01/01/2018 to 03/25/2020 TBD	In Progress		This project should be minimal impact, During occasional weather periods the RNAV 22L approach may have increased minimums.
В	Airfield Lighting	Airfield lighting improvements. Construction of electrical duct banks and manhole system near the approach end of RWY 22L.	04/01/2018 to 11/30/2019	In Progress		Primarily nighttime work near the approach end of RWY 22L that may require associated TWY closures.
С	RWY 4R/22L EMAS	Repair/replace Engineered Material Arresting System (EMAS) at Southwest end of RWY 4R/22L.	Fall 2018 to 04/30/2019	In Progress		Project will require runway closure but will be based on availability of alternate runways.
D	ATCT	Replacement/upgrade of ATCT emergency battery power supply (UPS).	08/01/2019 to 08/31/2019	Upcoming		ORM meetings in progress, plans for temporary tower during weekend overnight power loss.



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Α	TWYs N & J deicing pad																															
В	TWY A																															
С	RWY 9/27 Status Lights																															

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	TWYs N & J deicing pad	TWYs N & J, deicing (glycol collection) pad between RWY 36L and 36C.	09/01/2017 to 2020 TBD	In Progress		Area affects approaches during CAT 2/3 conditions. Airport will lower crane(s) when anticipating CAT 2/3 conditions to mitigate impact. However, some CAT 2/3 conditions may still add impact.
В		TWY A (West) full-depth reconstruction of approx. 4,125 ft. Includes demolition, grading, drainage, airfield signage, markings, and electrical lighting.  Duration 4 months	Spring 2019	Upcoming		Preconstruction meeting with airport authorities and discussion included construction dates and potential impacts.  Construction will be done in sections. Impact level will be changed if there is any effect on capacity or delays.
С	RWY 9/27 Status Lights	RWY 9/27 runway status lights (RWSL) system will be installed.	2020 TBD	Upcoming		Construction dates are TBD. Impact level will be changed if there is any effect on capacity or delays.



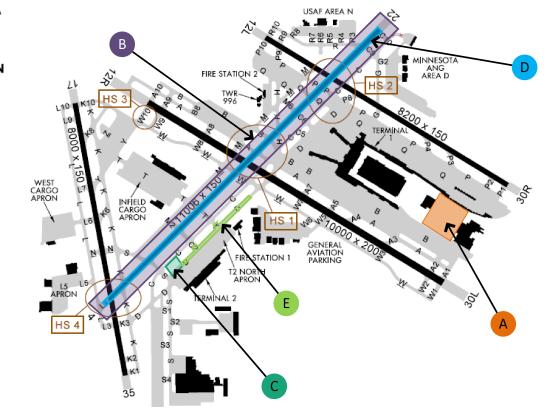
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Α	Parking Ramp Construction																																
В	RWY 4/22 Grading																																

I		Project	Description of Work	Estimated Dates	Status	Impact	Notes
	A	Parking Ramp Construction	Large cranes (4) will be erected to support Terminal 1 parking ramp construction. RWYs 12R and 12L have Cat II available to RWY threshold. Beyond RWY threshold, the localizer is unusable.	03/02/2018 to 08/31/2019	In Progress	•	Cranes impact the localizers on RWYs 12R, 12L, and 30L. This will reduce RWY 30L to a Cat I ILS only. There are no Cat III approaches available to RWY 12L or 12R. Will not reduce the arrival rate, but will impact what aircraft/airlines are able to conduct an approach. TMIs will be utilized during active weather conditions.
ı	В	RWY 4/22 Grading	RWY 4/22 Safety Area grading.	June 2019 to September 2019	Upcoming		

## MSP (2 of 2)—Minneapolis-St. Paul International/Wold-Chamberlain Airport

## Q2 2019 Airport Construction Impact Report

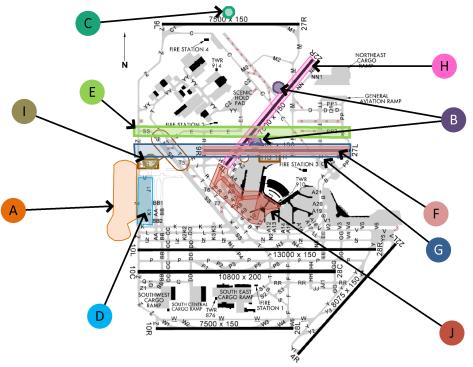




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С	TWY C1																																		
D	RWY 4/22 as TWY																																		
Е	TWY D																																		

ľ		Project	Description of Work	Estimated Dates	Status	Impact	Notes
ı			Construction of new TWY C1.				Limited taxi restrictions on ADG V & IV aircraft.
ı	С		Phase 1 - 7/15/19-8/30/19 Phase 2 - 9/02/19-10/18/19	07/15/2019 to 10/18/2019	Upcoming		Alternate taxi routes will be available.
	D	RWY 4/22 as TWY	Install RWY 4/22 guard and TWY edge lights.	Summer 2019 to Fall 2019	Upcoming		These lights will be turned on when RWY 4/22 is used as a taxiway.
	Е	TWY D	TWY D closed for reconstruction.	May 2020 to September 2020	Upcoming		Multi-phased project. Limited taxi restrictions on ADG III and IV aircraft.

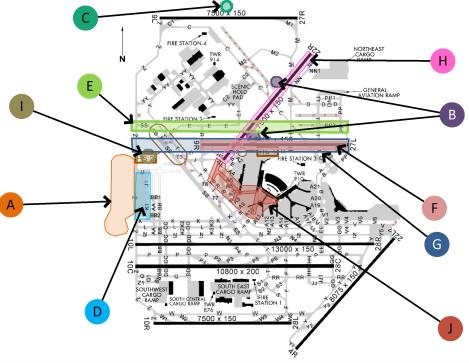
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Α	Western toll-way bypass																																			
В	VOR Decommissioning																																			
С	North ASDE																																			
D	West Field Deicing Pad																																			

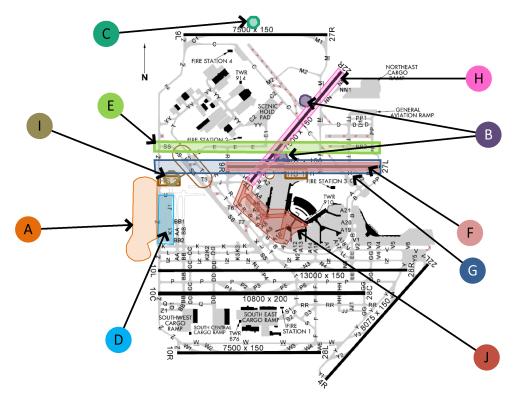
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	Western toll-way bypass	Toll-way construction along the western airport boundary from intersection of Business Road and S.R.83 westbound to Interstate 355.	03/01/2017 to 12/31/2021	In Progress		During construction, Construction cranes will impact approach minimums by increasing decision height (DH). NOTAMS in effect.
В	VOR Decommissioning	Current VOR/DME will be replaced with a standalone DME.	03/01/2017 to 01/03/2019	Complete		Standalone DME operational 1/3/2019.
С	North ASDE	Construction of a new North ASDE SMR (airport surface detection radar antenna) site.	06/18/2018 to 03/29/2019	Complete		
D	West Field Deicing Pad	Construction of a new deicing pad.	Summer 2018 to 02/01/2019 TBD	Complete		South taxiway access complete.

IATA Level 2



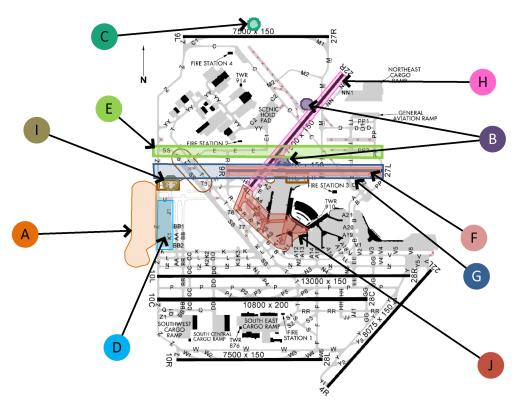
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Ε	RWY 9C/27C																															
F	RWY 9R/27L RWSL																															

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
E	RWY 9C/27C	New center runway construction (11,245 ft. long x 200 ft. wide).	05/01/2017 to 11/05/2020 TBD	In Progress		Dates fluctuate due to construction complexities. The scheduled commissioning date is 11/5/2020.  RWY 9R ILS currently in-service for Cat I approaches, further outage requests likely. Impact level may change during project due to weather changes.  Delays during IMC conditions are expected which is approx. 4% of the year. If weather is below 500-1/2 (LOCALIZER minimums); GDPs, MIT, airborne holding, and arrival delays of up to 60 minutes possible. The loss of 9R/27L glideslope during IMC conditions lowers airport to a 76 AAR.
F	RWY 9R/27L RWSL	RW 9R/27L install Runway Status Lights (RWSL).	02/01/2019 to 06/18/2019	In Progress		Nighttime closures only.



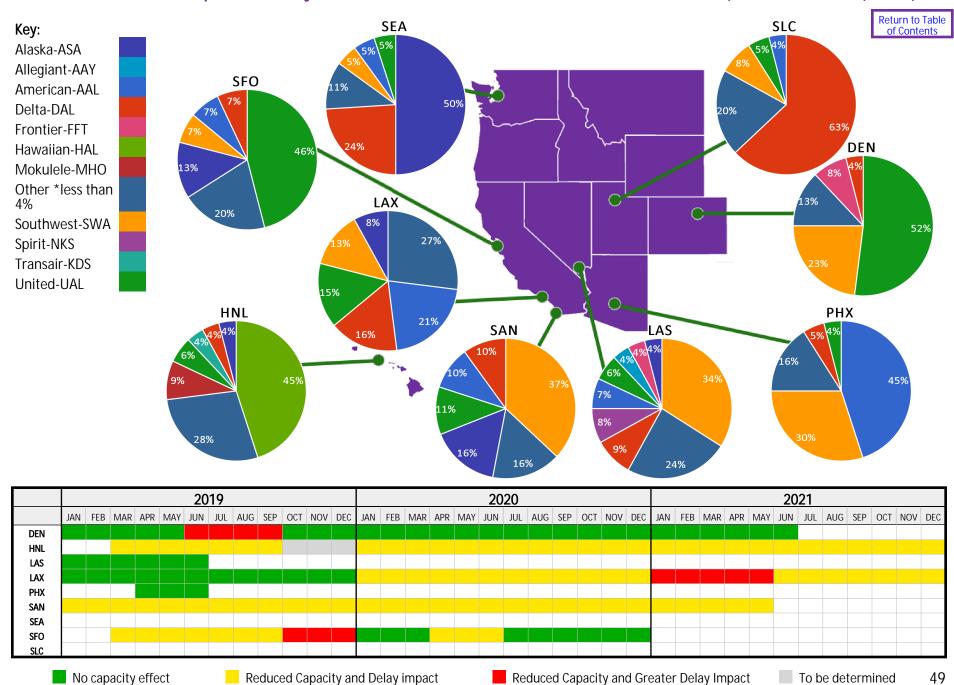
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G	RWY 9R/27L																												
Н	RWY 4L/22R																												

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
G	DIM/V QD/271	Runway 9R will be extended approximately 3,000 feet to the west. Runway 27L will be shortened approximately 300 feet to the west.	03/01/2019 to 12/02/2021	In Progress		Multi-phased construction during 3 seasons 1. 2019 West construction 2. 2020 Central construction 3. 2021 Runway 9R/27L closed until reopening after commissioning
Н	RWY 4L/22R	RWY 4L/22R closed for full length rehabilitation, lighting upgrades and surface markings.  RWY 22R localizer antenna will be relocated and glideslope antennas replaced/upgraded.	03/15/2019 to 10/31/2019	In Progress		RWY 4L-22R will be closed continuously until the end of the project. Strong SSW winds prohibiting a West Flow will cause a delay impact.

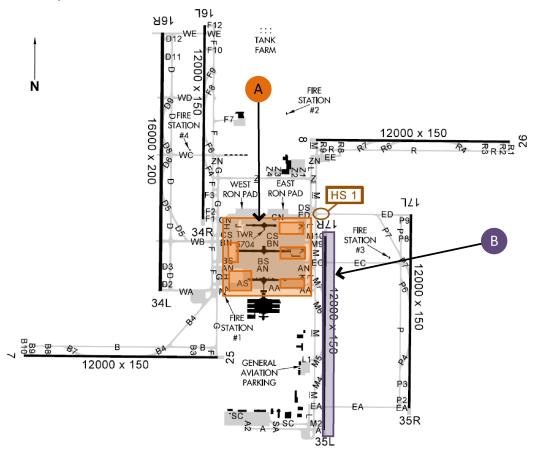


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- 1	Relocation of the west ASR-9																																								
J	New Terminal Areas Plan (TAP)																																								

	Pro	oject	Description of Work	Estimated Dates	Status	Impact	Notes
ı	Relocation of	the west ASR-9	The ASR will be relocated to the south airfield to support new RWY 9C-27C.	05/01/2019 to 07/01/2019	In Progress		South ASR-9 will be in service May 1, 2019 and the west ASR-9 (or mid-airfield) demolition June 1, 2019.
J		nal Areas Plan (AP)	TAP Phase I Elements – 10 Year Plan Construction of Satellite 1 Concourse, Satellite 2 Concourse, and Terminal 2 redevelopment.	11/02/2020 to 11/01/2028	Upcoming		Numerous taxiway closures while temporary taxi routes are being constructed. New temporary taxi routes will increase taxi in/out times during construction.



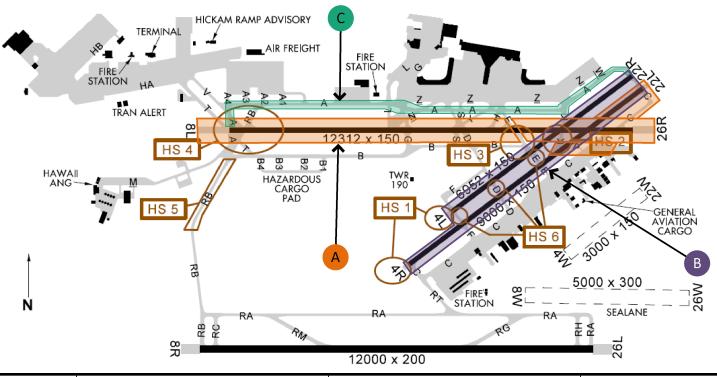




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Α	Terminals A, B, & C																																			
В	RWY 17R/35L																																			

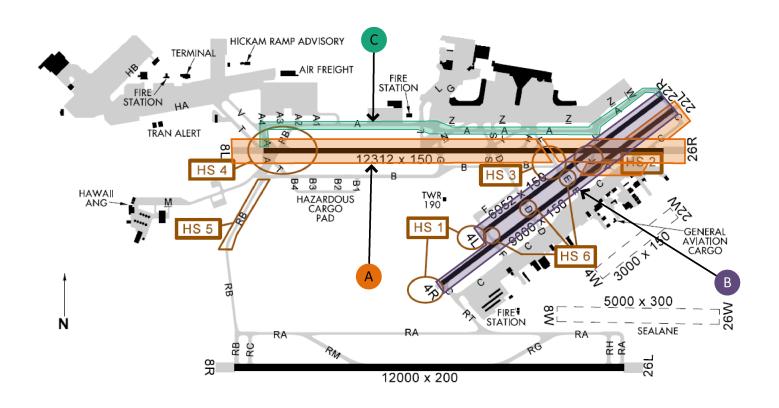
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	Terminals A, B, & C	Terminals A, B, and C expansion and redevelopment: Concourse A - 12 new gates Concourse B - 11 new gates Concourse C - 16 new gates	05/29/2018 to Spring 2021	In Progress		Expecting increased taxi times.  Airport gate capacity increase of 30%.
В	D\\/V 17D/25I	RWY 17R/35L closed for pavement rehabilitation and lighting upgrades.	06/03/2019 to 09/13/2019	Upcoming		Miles in trail, Time Based Flow Management, fix balancing, ground stop, GDP, and AAR adjustments will be used to accommodate traffic demand.





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	Project	JAN FEB	MAR APF	MAY	JUN J	JL AL	IG SEP	ОСТ	NOV	DEC	JAN	FEB N	MAR	APR N	ИΑΥ	JUN	JUL	AUG	SEP	OCT	VOV	EC JA	N FEE	MAR	APR	MAY	JUN	JUL	AUG S	EP C	OCT NO	DEC DEC
Α	RWY 8L/26R																															

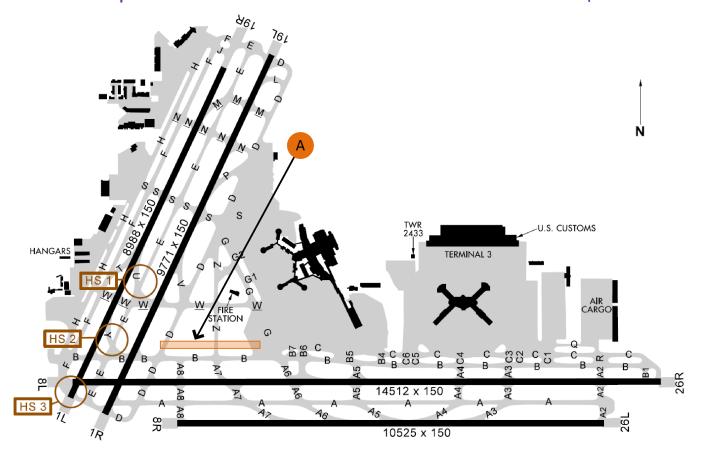
I		Project	Description of Work	Estimated Dates	Status	Impact	Notes
	A		RWY 8L/26R widening project from 150 to 200 feet.  RWY 26R shortened 3200' for east-end work, 9,100ft remaining.  Phase 1 (stages 1-2) completion by Sep. 2019  Stage 1 (east) = 79 days Stage 2 (center) = 193 days, full closure	03/19/2019 to September 2019	In Progress		9 Stage project. West and center stages RWY 8L requires full closures resulting in lower AARs. TMIs will be in place for arrivals during peak periods (0900-1500 HST), miles in trail (MIT), and/or call for release may be implemented.  Expecting arrival/departure delays 15 minutes. Expect delays for RWY 8R. Possible delays RWY 22/26 for RWY 22L departures due to RWY 26L arrivals. Increased taxi times for aircraft requesting RWY 26L departure.
			Phase 2 (stages 3-9) of 8L/26R should start January 2020 and should be completed by 2021. Design is being finalized.  Stages 3-9 = full closures	January 2020 to 2021 TBD	Upcoming		Expect TMIs for arrivals during peak periods.  Expect airborne and departure delays.



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В	RWY 4L/22R & 4R/22L																																				
С	TWY A																																				

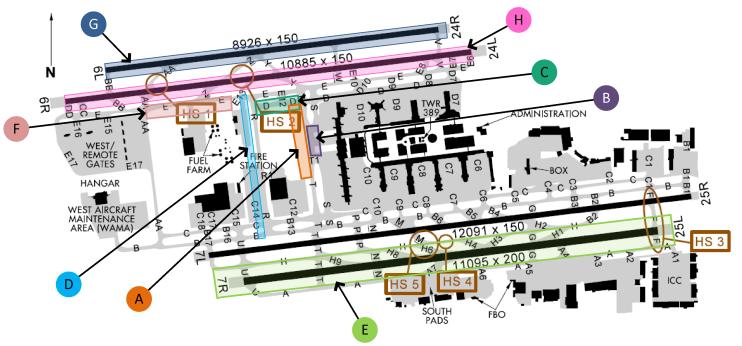
I		Project	Description of Work	Estimated Dates	Status	Impact	Notes
	В		Install runway Guard Lights for Runway Incursion Mitigation program (RIM).	Summer 2019 to Winter 2020	Upcoming		
	С	TWY A	TWY A realignment. Estimated start construction near end of year 2021.	2021 TBD to Fall 2021 TBD	Upcoming		Taxiway reconfigurations based on HNL geometry study completed May 2018.





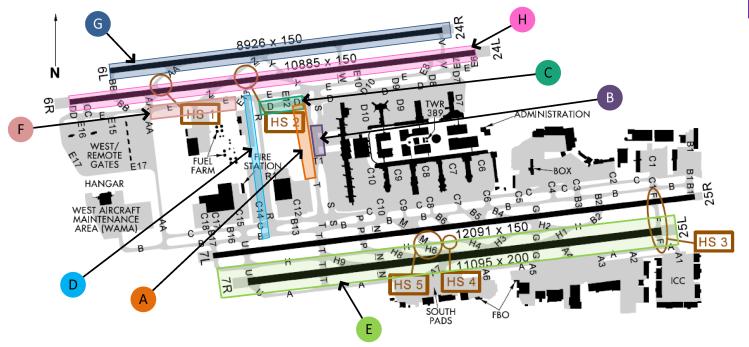
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Α	TWY C Extension																																			

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
^		Extension of TWY C between TWYs D and G. Area	11/26/2018 to 06/17/2019	In Progress		Equipment potentially impacted by the extension are VOR (operational limitations), TACAN/DME, receivers, Surface Weather System (SWS), and fiber optic and power cable runs.
۸	TWITE EXTENSION	approximately 2,600 ft. x 75 ft.	11/20/2010 to 00/17/2017	iii Fi Ogi ess		Some delays are expected based upon airport configuration. Officials have agreed to several work moratoriums during some of the high volume Las Vegas events.



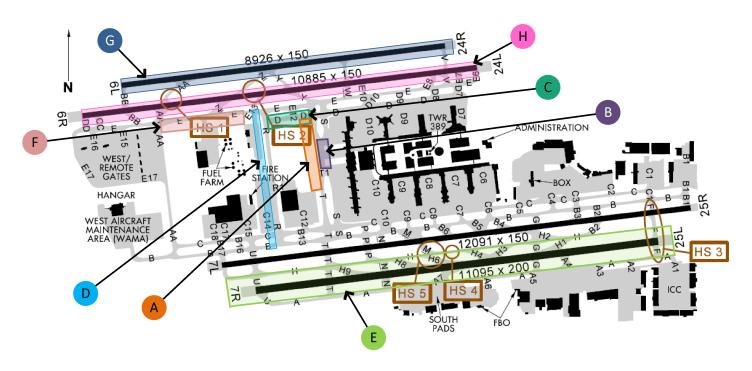
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Α	Midfield Satellite Concourse (MSC)																																			
В	TWY S																																			
С	TWY D (Center)																																			

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	Midfield Satellite Concourse (MSC)	Opening of new Terminal Gates and new TWY M.	08/01/2016 to 06/01/2020	In Progress		LAWA will assume control of TWYs S and T when TWY C14 (TWY P) has been completed.
В	TWY S	TWY S closed for construction, between TWY T1 and TWY T2.	06/06/2018 to 01/16/2020 TBD	In Progress		
С	TWY D (Center)	TWY D closed for construction, between TWY R and T.	09/17/2018 to May 2019 TBD	In Progress		Limited impact for taxiing aircraft.  Increased surface congestion during periods of peak demand.



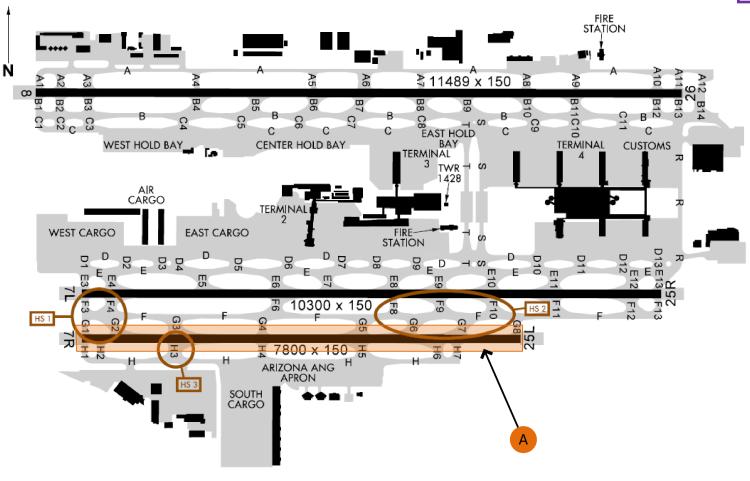
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Not Depicted	Taxiway Re-Designation Project																																		
D	TWY C14																																		
E	RWY 7R/25L,TWY H																																		

		Project	Description of Work	Estimated Dates	Status	Impact	Notes
0	Not epicted	Taxiway Re-Designation Project	Airfield wide project to re-designate LAX TWYs. There is 12 phases.	02/28/2019 to 2022 TBD	In Progress		Re-designation of South airfield TWY names will enable the new planned North airfield TWYs to utilized single letter designations.
	D	TWY C14	New TWY C14 between TWY E and TWY C and parallel to TWY R. TWY C14 is planned to be renamed TWY P.	01/01/2020 TBD to 12/01/2020 TBD	Upcoming		New taxiway construction. Capacity will be reduced with limited impact.
	E	RWY 7R/25L,TWY H	Runway and taxiway closure for reconstruction.	01/15/2021 to 05/31/2021	Upcoming		Runway closure will occur in two phases.  Runway closure will occur during Super Bowl in Los Angeles on 2/7/2021.



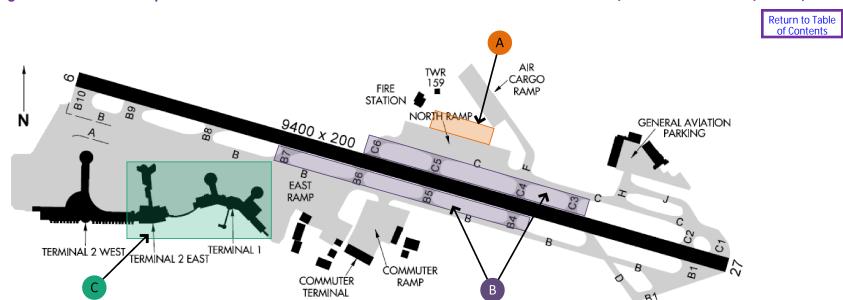
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F	TWY D Extension																																	
G	RWY 6L/24R																																	
Н	RWY 6R/24L																																	

I		Project	Description of Work	Estimated Dates	Status	Impact	Notes
			TWY D, closed area for surface construction from				New taxiway construction.
	F	TWY D Extension		Winter 2021 TBD to Winter 2022 TBD	Upcoming		Capacity will be reduced with limited impact.
			TWY AA closure to tie-in the New TWY D.				Expected start date: Q1-2021.
	G	RWY 6L/24R	New Exit TWYs	2022 TBD	Upcoming		Reduced CAT II/II Capability.
	Н	RWY 6R/24L	New Exit TWYs and tie-into TWY E.	2022 TBD	Upcoming		Reduced Taxi routes for RWY 24L departures w/ADG-VI impacts.



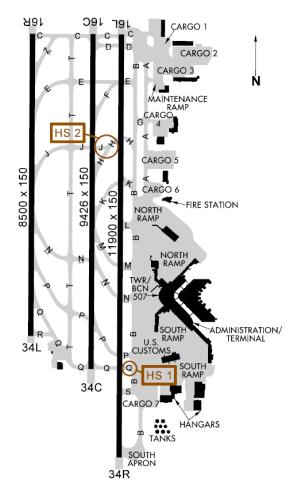
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Α	RWY 7R/25L																																				

ſ		Project	Description of Work	Estimated Dates	Status	Impact	Notes
	Α	RWY 7R/25L	RWY 7R/25L closed for repairs and maintenance.	Spring 2019 TBD	Upcoming		Weekend maintenance for RWY7R/25L. Minor impact to the operation.



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	Project	JAN	FEB	MAR	R APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB N	ИAR	APR I	MAY JI	UN	JUL A	UG S	SEP O	CT N	OV DEC
Α	New Cargo Facility																																			
В	RWY 9/27 & TWYs																																			
С	Terminal Replacement																																			
Not Depicted	Electrical Vault Relocation																																			

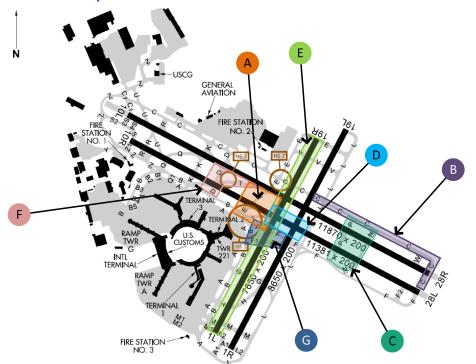
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	New Cargo Facility	Planned cargo facility at current transient aircraft parking location.	01/01/2018 to 04/30/2019	In Progress		Weather sensors require relocation, weather systems will provide seamless relocation with no WX data/TAF degradation.
В	RWY 9/27 & TWYs	RWY 9/27 closed nightly to support TWYs B4, B5, B6, B7, C3, C4 and C6 rehabilitation project.  Nightly RWY complex closed: Mon-Sat 0700Z-1200Z (5 hrs.)	10/10/2018 to 05/31/2019	In Progress		After PST on 11/5/18, closed 0800Z-1300Z (5 hrs.)
С	Terminal Replacement	Airport will replace passenger terminals.	01/01/2019 to 01/01/2021	In Progress		Aircraft gates added sequentially before legacy gates demolished.
Not Depicted	Electrical Vault Relocation	Electrical vault moved approximately 150 feet SE to allow for TWY expansion.	08/01/2020 to 05/01/2021	Upcoming		Phased to avoid reduction in services/capabilities. Airport will also relocate security fence to keep equipment shelters in the Air Operations Area (AOA).



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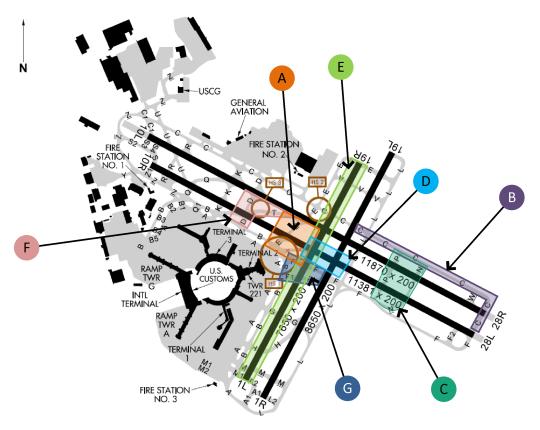
Project	Description of Work	Estimated Dates	Status	Impact	Notes
No projects at this time					

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Α	TWYs E & J																																
В	TWY C (East Area)																																
С	TWYs N & P																																
D	RWY 28L Intersections																																

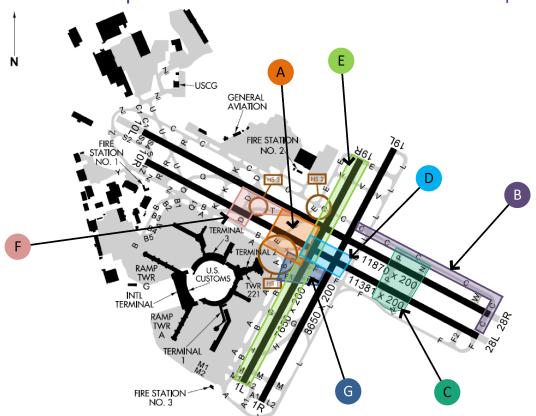
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	TWYs E & J	TWYs E and J reconstruction.	Q2 2019 TBD to Q4 2019 TBD	Upcoming		Future project, exact dates unknown.
В	TWY C (East Area)	TWY C reconstruction on the East-side of the airfield.	Q2 2019 TBD to Q4 2019 TBD	Upcoming		Future project, exact dates unknown.
С	TWYs N & P	TWYs N and P reconstruction.	Q2 2019 TBD to Q4 2019 TBD	Upcoming		Future project, exact dates unknown.
D	RWY 28L Intersections	Rebuild RWY intersections at RWY 1L and RWY 1R. Reconstruction of foundations for the RWY intersections.	09/07/2019 to 09/27/2019	Upcoming		Finalizing Schedule.



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E	RWY 1L/19R																																															
Not Depicted	Airfield Lighting										Ī																																					

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
E	RWY 1L/19R	RWY 1L/19R closed for rehabilitation.	Fall 2019	Upcoming		Repaving RWY.
Not	At Cald It about a	Airfield Lighting, Bldg. 1 electrical system upgrade	11/01/2019 to 2020	Upcoming		
Not Depicted	Airfield Lighting	Airfield lighting, 5kV cable replacement	Fall 2019 to Winter 2020	Upcoming		Future project, exact dates unknown.

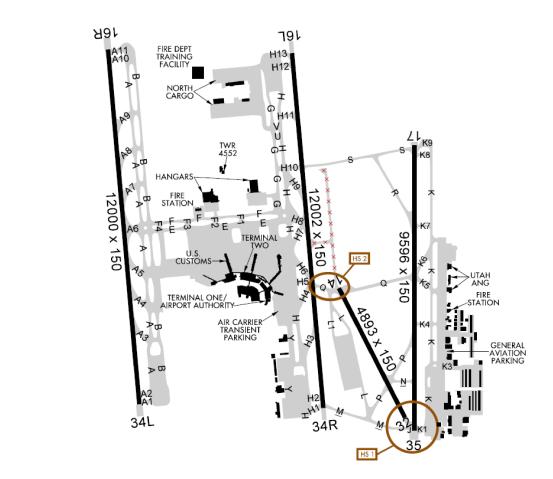
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F	TWYs D & T																																	
G	TWYs F and F1																																	

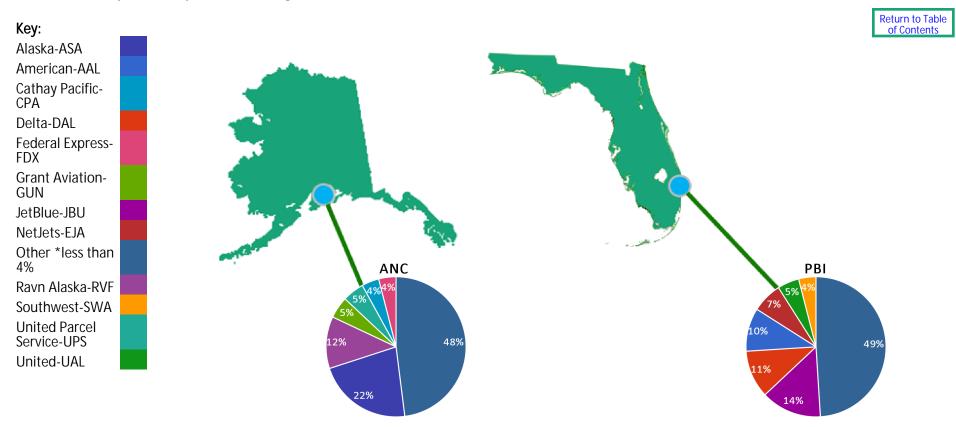
	Project	Description of Work	Estimated Dates	Status	Impact	Notes
F	TWYs D & T	Realignment of TWYs D and T for Runway Incursion Mitigation (RIM) Program. Phase A - nighttime 28L Closures - weeks Phase B - weekend runway 28R closure Phase C - full week runway 28L closure Phase D - nighttime 28L closures - 3 weeks Phase E - nighttime 28L closures - 3 weeks	Spring 2020	Upcoming		Multi-phased project to realign TWYs in order to rectify deficiencies with the existing geometry. It will enable aircraft entering RWY 10R to utilize the full length of the runway.  Expect increased surface congestion on TWY E.
G	TWYs F and F1	Realignment of TWYs for Runway Incursion Mitigation (RIM) Program.	Spring 2020	Upcoming		Project to realign TWYs in order to rectify deficiencies. Impact will be when the new TWYs are constructed to touch the RWYs.

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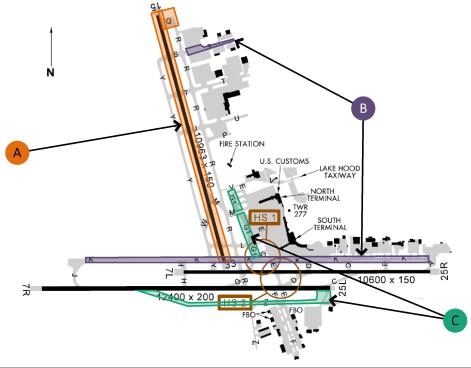


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Project	Description of Work	Estimated Dates	Status	Impact	Notes
No projects at this time					



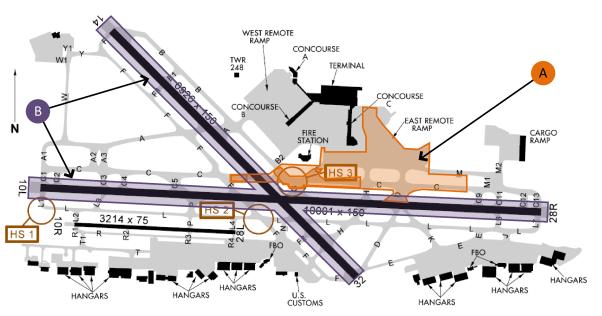




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Α	RWY 15/33 & TWYs																																
В	TWYs S & K																																
С	TWYs G1 & Z																																

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α		Runway 15/33 reconstruction. TWY Q will be reconstructed and relocated North of its present position. TWY F Reconstruction.	05/01/2019 to 09/30/2019	Upcoming		TWYs K, L, and S will remain open and available to cross at he North end and South end of the runway. TWY F will remain open with half-width operations in 6 phases. Miles in-trail and speed restrictions expected at arrival gates into ANC. May require call for release of aircraft departing from Alaska.
В		TWYs S and TWY K reconstruction. TWY K will be reconstructed and relocated to the North.	2020 TBD	Upcoming		
С	TWYs G1 & Z	TWY G1/Z East/West extension reconstruction.	2021 TBD	Upcoming		





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	Project	JAN	FEB	MAR	APR I	MAY JU	N JUL	AUG	SEP	OCT N	OV DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	VOV	DEC .	JAN	FEB	MAR AP	R MAY	JUN	JUL	AUG	SEP	OCT N	OV DEC
Α	Northeast Airfield & TWY C																																
В	RWYs 14/32 and 10L/28R																																

	Project	Description of Work	Estimated Dates	Status	Impact	Notes
Α	Northeast Airfield & TWY C	Stage 1, TWY C closed for rehabilitation from TWY H to TWY F and TWY G. Stage 1 - 7/8/19 to 9/20/19; Stage 2 - 9/21/19 to 10/5/19 Stage 3 - 10/6/19 to 11/4/19; Stage 4 - 11/5/19 to 12/12/19 Stage 5 - 12/13/19 to 1/12/20; Stage 6 - 1/30/20 to 4/1/20 Stage 7 - 4/2/20 to 5/16/20; Stage 8 - 5/17/20 to 5/30/20 Stage 9 - 5/31/20 to 6/5/20; Stage 10 - 6/6/20 to 6/15/20 Stage 11 - 6/16/20 to 6/25/20; Stage 12 - 6/26/20 to 10/23/20 Stage 13 - 10/24/20 to 2/23/21; Stage 14 - 2/24/21 to 5/4/21	07/08/2019 to 05/04/2021	Upcoming	•	No delays expected.
В	RWYs 14/32 and 10L/28R	RWY 14/32 + 10L/28R closed for repair and maintenance.	Summer 2019	Upcoming		RWY 10L/28R limited nighttime closures from 1030L to 0530L. RWY 14/32 single nighttime closure approx. 2 hours.