

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: John Aitken

SUBJECT: ANNUAL STATUS REPORT ON
THE AIRPORT MASTER PLAN

DATE: October 13, 2020

Approved



Date

10/15/2020

INFORMATION

This Annual Status Report on the Airport Master Plan for the year 2019 is being provided to Council pursuant to City Municipal Code Section 25.04.1210.

Background

In 1998, City Council adopted Ordinance No. 25528 and Resolution No. 67947 which created an “Implementation Program” for the Airport Master Plan adopted in 1997. This Implementation Program set forth conditions and requirements for Airport development to give additional assurance to the community that implementation of projects would proceed in an orderly manner.

Section 25.04.1210 of the Airport Master Plan Implementation Program Ordinance requires preparation of an annual evaluation of the Airport Master Plan, including the status of the capital improvement program, aviation activity levels and demand projections, and implementation of environmental mitigation measures and these Implementation Program Ordinance requirements. The following information fulfills this Municipal Code requirement for calendar year 2019.

Status of Master Plan Capital Improvement Program

The Airport Master Plan, as amended to date, identifies approximately 70 facility improvement projects to be implemented in a phased program to adequately serve aviation demand projected out to the year 2027, the majority of which have been completed. However, a major amendment to the Airport Master Plan approved in April 2020 updated and extended the Master Plan out to the year 2037 and added or revised numerous proposed capital projects.

The Airport’s capital program in 2019 comprised an array of airfield and landside facility upgrades, modifications, and studies, several of which were funded in part by FAA grants. Noteworthy projects completed, underway, or initiated during 2019 are highlighted as follows:

- Runway Incursion Mitigation (RIM)/Design Standards Analysis Study. The FAA grant-funded consultant study, initiated in late 2016 to improve airfield operational safety and

compliance with current FAA airfield design standards, continued to progress toward completion. An updated Airport Layout Plan displaying the recommended airfield modification and safety improvements was submitted to the FAA for required review and approval. Completion of the RIM Study, including FAA approval of the updated Airport Layout Plan, is expected by late 2020.

- Airport Master Plan Amendment. The proposed major amendment to the adopted Airport Master Plan progressed through the CEQA process in 2019. The amendment extends the Master Plan horizon year from 2027 to 2037, modifies the current Master Plan's facility development program to adequately serve the updated long-range demand, and incorporates the airfield safety/design improvements identified in the Runway Incursion Mitigation/Design Standards Analysis Study. A Draft Environmental Impact Report (DEIR) was issued for public review by PBCE in November 2019. [note: Council certification of the new Airport Master Plan EIR and adoption of the amended Airport Master Plan occurred April 28, 2020.]

Completed Capital Projects

- Terminal B Interim Expansion – 6 gates (#31-36), 30,000 sq. ft. modular facility.
- Terminal B Apron Rehabilitation (Phases 2 & 3) – FAA grant-funded replacement of 200,000 sq. ft. of deteriorated aircraft pavement located south of Terminal B.
- Airfield Electrical Rehabilitation (Phase 1) – FAA grant-funded upgrades to airfield signage/lighting system.

Projects Under Design/Construction

- Aircraft Rescue & Fire Fighting building (ARFF) - Design initiated in Summer 2019 for an upgraded and expanded Fire Station 20 located on the southwest side of the Airport.
- Economy Lot Parking Garage – Design initiated in Fall 2019 for the first phase of a multi-story public parking garage to add approximately 900 net new parking spaces at Parking Lot 1 northeast of Terminal A.

Status of Airport Activity Levels

The following table presents annual aviation activity levels over the last three years along with the new long-range projections contained in the proposed amendment to the Airport Master Plan.

Airport Activity Levels and Master Plan Forecasts

	2017	2018	2019	Projected 2037*
Air Passengers	12,480,232	14,319,292	15,650,444	22,532,000
Cargo Tonnage	61,365	60,182	55,197	100,200
Based General Aviation Aircraft	133	137	139	164
Airline Passenger Operations	119,514	135,132	147,430	183,920
All-Cargo Operations	1,606	1,590	1,516	1,960
General Aviation Operations	34,518	36,418	54,706¹	51,580
Military Operations	<u>216</u>	<u>243</u>	<u>203</u>	<u>250</u>
Total Operations	155,854	173,389	207,111	237,710

*Replaces projections for the current Master Plan’s horizon year of 2027.

¹ Includes “Air Taxi/Commuter” operations, a category not included in previous year activity reports

The 15.7 million passengers served in 2019 was a 9.3% increase from 2018, again one of the highest rates of airport growth in the country, and the seventh consecutive year of increased passenger activity at SJC. The number of passenger airline operations in 2019 (over 147,000) also increased by a comparable percentage (9.1%) from 2018, reflecting flights added by several new and incumbent airlines and again demonstrating that local passenger demand can support additional airline service. Southwest has remained the leading airline at SJC, accounting for close to half of all passengers and airline operations.

Passenger activity decreased slightly at both San Francisco International (SFO) and at Oakland International (OAK) airports in 2019. Combining the three airports, overall Bay Area air passenger traffic increased 1% from 2018, with SJC increasing its share of the regional total to 18%. Staff continues to monitor activity levels and work with airlines on providing service that meets the air travel needs of Silicon Valley residents and businesses.

In other segments of Airport activity in 2019, air cargo tonnage carried by both passenger airlines and all-cargo airlines decreased (8.3%) from 2018 along with the number of all-cargo airline operations (4.7%). General aviation (non-airline and non-military) aircraft operations increased by 50.2% in 2019, due to the inclusion of the Air Taxi/Commuter category into General Aviation operations.

Total aircraft operations at the Airport in 2019 (207,111), including passenger airlines, all-cargo airlines, general aviation, and military, increased (19.4%) from 2018. Overall, aviation activity levels in 2019 remained consistent with the long-term demand projections for the year 2027 contained in the current Airport Master Plan, as well as with the updated demand for 2037. It should be noted, however, that the COVID-19 pandemic has significantly impacted aviation activity beginning in March 2020. Activity levels are not expected to return to the volumes achieved in 2019 at least until the year 2022. The impact on the Airport’s long-term growth

HONORABLE MAYOR AND CITY COUNCIL

October 13, 2020

Subject: Annual Status Report on the Airport Master Plan

Page 4

projections is currently unknown. Staff will continue to monitor and report on the effects and recovery from the pandemic.

Status of Implementation Program Requirements

Attachment 1 provides a 4-page itemized listing and status report on compliance with the adopted 1998 Airport Master Plan Implementation Program.

Status of EIR Mitigation Measures

Attachment 2 provides a 2-page itemized listing and status report on implementation of the environmental mitigation measures identified in the 1997 Airport Master Plan Environmental Impact Report (EIR) and the 2003 Supplemental EIR. [note: a new EIR certified by Council in April 2020 contains a revised set of mitigation measures to be listed in next year's annual report.]

/s/

JOHN AITKEN, A.A.E.
Director of Aviation

Please contact John Aitken, Director of Aviation, at 408-392-3610, with any questions.

Attachments

ATTACHMENT 1
Airport Master Plan Implementation Program Status Report for 2019

(Page 1 of 4)

Element	Status
1. All Airport capital projects to be consistent with the Master Plan. [SJMC Section 25.04.210]	Ongoing.
2. Facility limitations: 40 air carrier gates; 12,700 public parking spaces; terminal building space and rental car ready/return spaces restricted to #s in current Master Plan. [SJMC Section 25.04.300]	Ongoing.
3. No additional gates until at least year 2000, annual passenger volume exceeds 11.2 million, and transportation prerequisites specified in #10 below are met. [SJMC Section 25.04.310]	Completed.
4. Construction of Route 87 must be underway prior to new terminal, parking garage, or west side cargo facility construction. [SJMC Section 25.04.330-A]	Completed.
5. All Stage 3 aircraft to be operating at Airport prior to new terminal, public parking garage, or west side cargo facility construction. [SJMC Section 25.04.330-B]	Completed.
6. Council to review tenant/airline compliance with Noise Control Program prior to proceeding with new landside facilities for those tenants/airlines. [SJMC Section 25.04.330-C]	Ongoing.
7. Council to review Airport activity levels with forecasts and EIR adequacy prior to proceeding with new terminal, west side cargo, or general aviation facilities. [SJMC Section 25.04.330-D]	Ongoing.
8. Prior to proceeding with new cargo or general aviation facilities, demonstrate need for such facilities and funding commitment by prospective tenants. [SJMC Section 25.04.330-E]	Ongoing.
9. Prior to proceeding with new terminal buildings, conduct review of airline leases and financial commitments in accordance with established City policies. [SJMC Section 25.04.350]	Ongoing.
10. Prior to proceeding with construction of a Central Terminal or additional gates, the following transportation projects to be within 3 years of completion with funding identified: Route 87 Freeway; added southbound lane on Coleman Ave. at I-880; and improvement at 3 Airport entrances to specified levels of service. Funding source for a rail or fixed guideway connection between Airport and light rail or Caltrain station also to be identified. Voter approval required to modify these requirements. [SJMC Section 25.04.410]	Completed.
11. City Manager and Director to meet at least annually with all tenant airlines to seek compliance with the Noise Control Program, including voluntary minimization of curfew-compliant operations, avoiding published departure/arrival times within curfew hours, complete/accurate reporting of reasons for curfew period operations, and adhering to FAA-designated approach paths. Airport to prepare an annual report on airline compliance and good faith efforts. [SJMC Section 25.04.510]	Ongoing. [general airline meeting on Noise Control Program held 3/13/19; airline compliance & good faith effort report for 2019 submitted to Council as a separate Info Memorandum]

Attachment 1. Airport Master Plan Implementation Program Status Report for 2019

(Page 2 of 4)

Element	Status
12. City to continue to require Noise Control Program compliance in airline agreements and seek enforcement provisions in agreements for new facilities. [SJMC Section 25.04.530]	Ongoing.
13. Any proposed modification to the Noise Control Program requires appropriate CEQA, Master Plan, public and FAA review. [SJMC Section 25.04.550]	Ongoing.
14. Airport to continue engine run-up monitoring and reporting. If high power run-ups average more than 3 per month during curfew hours over any 12-month period, report to Council and initiate a run-up enclosure facility project. [SJMC Section 25.04.570]	Ongoing. [21 high power run-ups occurred during curfew hours in 2019]
15. Airport to institute and maintain procedures for substantiating the reasons for curfew intrusions. [SJMC Section 25.04.590]	Completed/ongoing.
16. City to establish a monitoring committee to review curfew intrusions on a quarterly basis, issue a report to Council, and make referrals to City Attorney if non-compliant operations by a single operator are deemed excessive. [SJMC Section 25.04.610]	Completed. [requirement repealed in 2013 by Ordinance 29250]
17. Acoustical treatment of homes in projected 2010 65 CNEL to be completed prior to development of a new terminal, west side cargo, or public parking garage facility. [SJMC Section 25.04.710-A]	Completed.
18. Acoustical treatment of homes in the 1994 65 CNEL to be completed in 2000. [SJMC Section 25.04.710-B]	Completed.
19. Complete acoustical treatment of homes in projected 60-65 CNEL areas identified in Master Plan EIR as significantly impacted, if determined to be eligible for treatment, by 2005. [SJMC Section 25.04.710-C]	Completed.
20. Establish a supplemental noise attenuation program, on a request basis, for homes in projected 60-65 CNEL areas not identified in Master Plan EIR as significantly impacted, and complete program for homes determined to be eligible by 2005, with program available through 2010. [SJMC Section 25.04.730]	Completed.
21. Conduct a supplemental noise attenuation program, on a request basis, for schools in projected 60 CNEL. [SJMC Section 25.04.750]	Completed.
22. Monitor 60 and 65 CNEL after 2000 for comparison with EIR projections and apply noise attenuation programs to the larger of the impact areas. [SJMC Section 25.04.770]	Completed.
23. Director authorized to issue certain contracts and change orders for the noise attenuation program, and to accept or amend aviation easements. [SJMC Sections 25.04.790, 25.04.810, 25.04.830]	Completed/ongoing.
24. If peak hour aircraft operations exceed 130 operations, prepare report to Council for consideration of operational restrictions. [SJMC Section 25.04.900]	Ongoing.
25. 2/3 Council approval required for any airfield expansion allowing for simultaneous instrument operations. [SJMC Section 25.04.910]	Ongoing.

Attachment 1. Airport Master Plan Implementation Program Status Report for 2019

(Page 3 of 4)

Element	Status
26. Develop an Airport Transit Access Master Plan in cooperation with VTA, including a goal of 15% of Airport trips by transit by 2005 and with a convenient connection to light rail and Caltrain. [SJMC Section 25.04.1100]	Completed.
27. City to participate with other agencies in developing solutions to Airport area intersection and freeway traffic deficiencies. [SJMC Section 25.04.1110-A]	Completed/ongoing.
28. City Manager to report to Council on road improvement plans prior to approval of new terminal or west side cargo facilities. [SJMC Section 25.04.1110-B]	Ongoing.
29. Prepare an annual Master Plan evaluation report for Council. [SJMC Section 25.04.1210]	Ongoing.
30. Establish FAA Tower Order requiring jet departures to begin from end of extended runways except for emergencies. [Resolution 67947, Section 1]	Completed/ongoing.
31. City Manager and Director to discuss with the County and FAA the use of Airport funds to assist in relocation of general aviation aircraft to Reid-Hillview, including construction of hangars and an acoustical treatment program. [Resolution 67947, Section 2]	Not pursued.
32. Mayor, City Manager, and Director to begin working with other agencies within 90 days to formulate a County-wide aviation plan including Reid-Hillview and Moffett. [Resolution 67947, Section 3]	Not pursued.
33. City Manager and City Attorney to negotiate a master project labor agreement with the Building & Construction Trades Council for specified Phase 2 projects. [Resolution 67947, Section 4]	Completed/ongoing.
34. City to encourage federal legislation to phase out noisier Stage 3 aircraft between the years 2000 and 2005, and encourage airlines to use quietest Stage 3 aircraft at the Airport, particularly in the time period surrounding the curfew hours. [Resolution 67947, Section 5]	Completed/ongoing.
35. Director to pursue a funding eligibility determination from the FAA for acoustical treatment of homes within projected 60-65 CNEL without regard to interior noise level standards. If not eligible, Director to consider and report to City Manager on use of local Airport funds for a loan program for the same purposes. [Resolution 67947, Section 6]	Completed.
36. Airport to complete monthly noise reports within 60 days of reporting month, and to complete quarterly noise reports in a timely manner (objective of 60 days of reporting quarter). [Resolution 67947, Section 7-A]	Ongoing. [monthly noise reports replaced in 2011 by monthly website summaries per Resolution 75781]
37. City Manager or Director to notify and discuss non-compliant curfew operations under the Noise Control Program with aircraft operators after the first occurrence. [Resolution 67947, Section 7-B]	Ongoing. [curfew ordinance]

Attachment 1. Airport Master Plan Implementation Program Status Report for 2019

(Page 4 of 4)

Element	Status
38. Director and City Attorney to develop guidelines for referral of non-compliant curfew operations under the Noise Control Program for legal action. Attorney authorized to file actions seeking compliance with Noise Control Program. [Resolution 67947, Section 7-C/D]	Ongoing. [curfew ordinance]
39. Airport to prepare an analysis of noise monitoring system locations and report to Council within one year with a recommended plan for additional noise monitors. [Resolution 67947, Section 8]	Completed.

ATTACHMENT 2

Airport Master Plan EIR Mitigation Program Status Report for 2019

(Page 1 of 2)

Mitigation Measure	Status
1. [Traffic] Prohibit left turns from Martin Ave. into interim west side public/employee parking lot.	Impact eliminated in 2010 with relocation of parking to east side as part of TAIP.
2. [Traffic] Restripe westbound Brokaw Rd. at Coleman Ave. to allow one left turn-only lane and one left/through/right turn lane.	Completed.
3. [Traffic] Add third left turn lane from southbound Central Expressway at De La Cruz Blvd.	Completed.
4. [Traffic] Add second left turn lane from southbound Coleman Ave. at Airport Blvd.	Completed.
5. [Traffic] Add third through lane on westbound Brokaw Rd. at N. First St.	Not yet applicable.
6. [Traffic] Add additional northbound and southbound through lanes on Airport Blvd. at Airport Pkwy.	Impact eliminated in 2003 by reconfigured Airport Blvd./ Terminal Dr. one-way loop.
7. [Traffic] Add third left turn lane on northbound Airport Blvd. at north Terminal Dr. connection.	Impact eliminated in 2010 by TAIP Terminal A bypass loop.
8. [Traffic] Add third through lane on eastbound Old Bayshore Hwy. at N. First St.	Not yet applicable.
9. [Traffic] Restripe southbound N. First St. at Skyport Dr. to allow two through lanes and one right turn-only lane.	Not yet applicable.
10. [Traffic/Air Quality] Develop and implement a Transportation System Management (TSM) Program as described in EIR.	Completed/ongoing.
11. [Air Quality] Develop/implement a pollutant emissions abatement program during construction.	Ongoing.
12. [Air Quality] Comply, and ensure tenant compliance, with all BAAQMD requirements for stationary emissions facilities.	Ongoing.
13. [Air Quality] Inform van/shuttle, rental car, and air cargo truck fleet operators that regularly serve SJC of City policy encouraging conversion of vehicles to alternative fuels.	Completed/ongoing.
14. [Air Quality] Inform airlines that City supports single or reduced engine taxiing to extent that it would provide air quality benefits and is determined by the FAA and airline to be a safe and efficient procedure.	Completed.
15. [Noise] Continue implementation of existing Noise Control Program, Acoustical Treatment Program, aviation easement requirements, and noise monitoring system improvements as described in EIR.	Completed/ongoing.
16. [Noise] Subject to FAA concurrence, impose the existing restrictions on Rwy. 12R-30L jet takeoffs to Rwy. 12L-30R.	Completed/ongoing.

Attachment 2. Airport Master Plan EIR Mitigation Program Status Report for 2019

(Page 2 of 2)

Mitigation Measure	Status
17. [Noise] If high power engine run-ups during curfew hours average more than 4 per month over a 12-month period, City to re-consider a noise attenuation facility.	Ongoing. [21 high power run-ups occurred during curfew hours in 2019]
18. [Noise] Conduct engine run-up noise measurements upon completion of blast fences at ends of Rwy. 12L-30R to determine best location for minimizing run-up noise.	Completed.
19. [Noise] Request County ALUC to update its land use plan consistent with Master Plan and current FAA land use guidelines.	Completed.
20. [Noise] Offer acoustical testing/treatment to Bachrodt Elementary School to meet interior noise level standard of 45 dB Leq.	Completed.
21. [Noise] Monitor noise levels in Rosemary Gardens area after construction of the Route 87 soundwall to determine eligibility for adding homes to the ACT Program.	Completed.
22. [Noise] Offer acoustical testing/treatment to Agnews State Hospital (Santa Clara campus) to meet interior noise level standard of 45 dB CNEL.	Impact eliminated in 1998 by property conversion to compatible land use.
23. [Cultural Resources] Continue existing archaeological monitoring program as described in EIR for all construction projects within designated sensitive areas.	Ongoing.
24. [Hydrology/Water Quality] Increase storm runoff ponding or pumping capacity at north end of Airport.	Completed.
25. [Hydrology/Water Quality] Construct a retention wall around north end of Airport to prevent runoff onto Hwy. 101.	Completed.
26. [Hydrology/Water Quality] Continue implementation of Storm Water Pollution Prevention Program and update as needed.	Ongoing.
27. [Hydrology/Water Quality, Geology/Seismicity, Hazmat] Design new jet fuel storage tanks to meet current requirements, and amend stormwater and applicable emergency plans for fuel storage tanks.	Completed.
28. [Geology/Seismicity] Design and construct all facilities to comply with applicable City building codes and other safety standards.	Ongoing.
29. [Biological Resources] Implement Burrowing Owl Management Plan as described in EIR.	Ongoing.
30. [Biological Resources] Prior to construction of rental car facility bridge, conduct surveys of special status species along Guadalupe River and consult with permitting agencies on any mitigation.	Not yet applicable.
31. [Biological Resources and Aesthetics] Design new jet fuel storage facility to comply with 100-foot setback from bank of Guadalupe River and screen tanks from Hwy. 101 and adjacent land uses.	Completed.
32. [Hazmat] Investigate potentially contaminated sites prior to project construction and, if applicable, implement work safety precautions.	Ongoing.