

Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: John Aitken

SUBJECT: ANNUAL STATUS REPORT ON
THE AIRPORT MASTER PLAN

DATE: December 17, 2021

Approved



Date 12/20/21

INFORMATION

This Annual Status Report on the Airport Master Plan for the year 2020 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 2020.

Status of Master Plan Capital Improvement Program

The Airport Master Plan, as amended to date, identifies a host of facility improvement projects to be implemented in a phased program to adequately serve aviation demand projected out to the Master Plan horizon year 2037. A major amendment to the Airport Master Plan was approved in April 2020, adding and modifying approximately 20 facility improvement projects, to bring the total to 90 projects. Of the 90 facility improvement projects identified in the Airport Master Plan, approximately 50 have been completed to date.

The Airport’s capital program in 2020 comprised 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 2020 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 modifications and safety improvements was approved by the FAA in June 2020. [The RIM Study was completed in June 2021.]

Capital Projects Under Design/Construction

- Airfield Electrical Rehabilitation (Phase 2) – Design work on FAA grant-funded upgrades to airfield signage/lighting system was initiated to replace infrastructure that reached the end of its useful life. Phase 2 construction is expected to start in late 2021.
- Aircraft Rescue & Fire Fighting building (ARFF) – Construction began August 2020 and forecasted completion is early 2022.
- Economy Lot Parking Garage – Construction began in Spring 2020 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. [The Economy Lot Parking Garage opened to the public on July 1st, 2021.]

Status of Airport Activity Levels

In 2020, the global pandemic impacted the entire aviation industry, resulting in a significant decline in passenger and airline operations numbers and associated decline in revenues. 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

	2018	2019	2020	Projected 2037
Air Passengers	14,319,292	15,650,444	4,711,577	22,532,000
Cargo Tonnage	60,182	55,197	43,092	100,200
Based General Aviation Aircraft	137	139	150	164
Airline Passenger Operations	135,132	147,430	71,462	183,920
All-Cargo Operations	1,590	1,516	1,470	1,960
General Aviation Operations	36,418	54,706 ¹	37,696¹	51,580
Military Operations	243	203	152	250
Total Operations	173,389	207,111	115,952	237,710

¹ Includes “Air Taxi/Commuter” operations, a category not included prior to 2019 in activity reports

SJC served 4.7 million passengers in 2020, a 70% decrease from 2019. The year 2020 saw a dramatic decrease in aviation travel in the Bay Area, due to the global pandemic. The number of passenger airline operations in 2020 decreased by 52% from 2019, reflecting the reduction in

airline flights due to the global pandemic. Southwest has remained the leading airline at SJC, accounting for almost 50% of all passengers and airline operations.

Passenger activity saw comparable decreases at both San Francisco International (SFO) and at Oakland International (OAK) airports in 2020. Combining the three airports, overall Bay Area air passenger traffic decreased by 71% from 2019, with SJC accounting for 19% of the regional total. 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 2020, air cargo tonnage carried by both passenger airlines and all-cargo airlines decreased (22%) from 2019 along with the number of all-cargo airline operations (3%). General aviation (non-airline and non-military) aircraft operations decreased by 31% in 2020.

Total aircraft operations at the Airport in 2020 (115,952), including passenger airlines, all-cargo airlines, general aviation, and military, decreased (44%) from 2019.

Status of Implementation Program Requirements

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

Status of EIR Mitigation Measures

Attachment 2 provides an 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: As of April 28th, 2020, a new EIR was certified by City Council, containing a revised set of mitigation measures listed in **Attachment 3** of the annual report.]

Attachment 3 provides an itemized listing and status report on implementation of the environmental mitigation measures identified in the April 2020 Airport Master Plan Amendment Environmental Impact Report (EIR), applicable starting April 28th, 2020.

/s/

JOHN AITKEN, A.A.E.

Director of Aviation

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

Attachments

ATTACHMENT 1
Airport Master Plan Implementation Program Status Report for 2020

Element	Status
1. All Airport capital projects to be consistent with the Master Plan. [SJMC Section 25.04.210]	Ongoing.
2. Facility limitations: 42 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.

Element	Status
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 5/27/2020; airline compliance & good faith effort report for 2020 submitted to Council as a separate Info Memorandum]
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. [0 high power run-ups occurred during curfew hours in 2020]
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.

Element	Status
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.
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.

Element	Status
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]
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 2020*

*Mitigation Measures (#1-32) below are from the 1997/2003 EIR Mitigation Program. This program was replaced with a new Mitigation Measure program on April 28th, 2020 with City Council certification of the 2020 EIR.

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.

Mitigation Measure	Status
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.
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. [0 high power run-ups occurred during curfew hours in 2020]
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 sound wall 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.

Mitigation Measure	Status
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.

Attachment 3

Airport Master Plan EIR Mitigation Program Status Report for 2020*

*As of April 28th, 2020, the Airport has implemented the Mitigation Measures below from the 2020 EIR.

Mitigation Measure	Status
1. [Air] All off-road equipment greater than 25 horsepower shall have engines that meet Tier 4 Final off-road emissions standards.	Ongoing.
2. [Air] Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes, at any location, except as described in the EIR.	Ongoing.
3. [Air] Contractor shall maintain and tune equipment in accordance with manufacturer specifications.	Ongoing.
4. [Air] Before starting onsite ground disturbance, demolition, or construction activities, the contractor shall prepare and submit a Construction Emissions Minimization Plan (CEMP).	Ongoing.
5. [Air] A minimum of 10 percent of the total number of spaces provided in the proposed short-and long-term parking garages will be designed and constructed for electric vehicle (EV) charging capability.	Ongoing.
6. [Biological Resources] Pre-Activity Surveys required for Congdon's Tarplant no more than five years prior to initial ground disturbance for any projects that impacts ruderal grassland.	Ongoing.
7. [Biological Resources] Avoidance Buffers. City to design and construct the Project to completely avoid impacts on all populations of Congdon's Tarplant.	Ongoing.
8. [Biological Resources] Preserve and Manage Mitigation Populations. If avoidance of Congdon's Tarplant is not feasible and more than 10% of the population would be impacted, compensatory mitigation will be required.	Ongoing.
9. [Biological Resources] Avoidance and Inhibition of Nesting. Construction and tree removal/pruning shall be scheduled to avoid the nesting season (February 1 to August 31).	Ongoing.
10. [Biological Resources] Preconstruction Survey(s). If it is not possible to schedule construction activities during the period of September 1 through January 31, then preconstruction survey required.	Ongoing.
11. [Biological Resources] After preconstruction survey, submit a final report on nesting birds and raptors.	Ongoing.
12. [Biological Resources] Conduct Pre-Activity Surveys for Roosting Bats	Ongoing.
13. [Biological Resources] Avoid Disturbance of Active Bat Roosts during construction activities.	Ongoing.
14. [Biological Resources] Avoid Disturbance of Bat Maternity Roosts (March 15 to August 31) during construction activities.	Ongoing.

Mitigation Measure	Status
15. [Biological Resources] Exclude Bats Prior to Disturbance during construction activities.	Ongoing.
16. [Biological Resources] Provide Compensatory Mitigation to the Santa Clara Valley Habitat Agency for permanent impacts on Burrowing Owl Nesting Habitat for projects identified in EIR.	Ongoing.
17. [Biological Resources] Update and implement Burrowing Owl Management Plan as described in EIR.	Ongoing.
18. [Biological Resources] Pay nitrogen deposition fees for covered activities under the Santa Clara Valley Habitat Agency Plan, based on net new daily vehicle trips, for specific projects identified in EIR.	Ongoing.
19. [Biological Resources] Ensure all new development is outside of the 100-foot riparian buffer along the Guadalupe River.	Ongoing.
20. [Biological Resources] If development must encroach into the 100-foot riparian buffer along the Guadalupe River, provide compensatory mitigation as specific in the EIR.	Ongoing.
21. [Biological Resources] Implement Bird-Safe Building Design for all buildings constructed or modified within 300 feet of the Guadalupe River:	Ongoing.
22. [Cultural Resources] Continue existing archaeological monitoring program as described in EIR for all construction projects within designated sensitive areas.	Ongoing.
23. [Cultural Resources] In the event that human remains are discovered during excavation and/or grading of a site, all activity within a 100-foot radius of the find shall be stopped and the Santa Clara County Coroner shall be notified.	Ongoing.
24. [Greenhouse Gas Emissions] Develop and implement a phased carbon management program that is consistent with the standards of Airports Council International (ACI) ³ Level 3+ Carbon Accreditation Program, or equivalent.	Ongoing.
25. [Hazmat] EIR projects shall be designed, constructed, and maintained in compliance with all applicable regulatory standards and policies.	Ongoing.
26. [Hazmat] Prior to beginning construction activities, the City shall investigate construction work areas to characterize soil and groundwater quality at potentially contaminated sites by completing a limited soil and groundwater investigation.	Ongoing.
27. [Hazmat] The City will require the construction contractor for each Project to develop and implement a Site Management Plan (SMP) or similar document to manage the cleanup of contaminated soils.	Ongoing.