

February 23, 2018

Eric Peterson
Director, County Airports
2500 Cunningham Ave
San Jose, CA 95148

Dear Eric:

I'm writing to provide some additional recommendations for the Santa Clara County Airports Business Plan Update in process today. These recommendations are specific to Reid-Hillview Airport as that is where I operate. My recommendations are split into three categories: increasing airports income, decreasing airports expenses and making Reid-Hillview a valued asset to the surrounding community of East San Jose.

Generate New Revenue

The following recommendations are based on the increased demand for professional flight training driven by the growth of the commercial aviation market and the need for new professional pilots to replace retiring Part 121 pilots and fly the expanding commercial fleet. Reid-Hillview is primarily a training airport. I believe acknowledging, capitalizing on and expanding/supporting Reid-Hillview's strength as a training airport will help create additional revenue.

- Create policies that encourage the location of flight training businesses at RHV. This will increase:
 - The number of people using the airport who are potential customers for all kinds of businesses that would consider locating at the airport
 - The number of aircraft based at the airport, increasing tax revenues from fuel and property taxes
- Pursue commercial leasing of available properties - already being discussed in the Business Plan
- Open up leasing of vacant offices for aviation related businesses
 - One small office provided the equivalent of 5 aircraft tie downs revenue for a year
 - If it truly is more expensive to lease and office than the moneys made, the processes that create the situation should be closely scrutinized and changed as they impact County income
- Consider updating and moving little league fields to Capital/Tully property
 - A portion of Capital/Tully property is in the Turning Safety Zone for the airport, limiting development options for a portion of the property. If the desired commercial land use is not compatible with Turning Safety Zone, relocating the little league fields would free up the properties on Cunningham Ave and Swift for commercial development.

- Transition 25 county tie downs into FBO tie downs with FBO lease renewals
 - My survey of current RHV FBOs shows they would be able to fill 25 additional tie downs if they were available.
- Reduce tie down rates to draw aircraft from other Bay Area airports
 - Lower cost tie downs that are priced at or below other Bay Area airports, especially Livermore and Concord, would draw in more aircraft owners that are weekend fliers to base their aircraft at Reid-Hillview. This would directly increase airport revenues.
- Build a small set of new hangars priced similar to other Bay Area airports
 - Hangars have been one of the main money makers at Reid-Hillview. Consider building 5-10 more hangars and see if they can be filled. That will bring in more money than the same number of aircraft in tie downs.
- Take advantage of increased use of airport by leasing to providers of additional services
 - Publicize the number of people using the airport on a daily / weekly basis to potential service providers. We are, essentially, a captive audience that would be happy to patronize businesses at the airport rather than driving or walking to other locations.

Reduce Costs

The County accepted multiple grants in the early and mid 2000's. Those grants included a clause specifying the airport sponsor agrees to operate the property as an airport in perpetuity if property was acquired with federal funds to expand the airport. This clause applies to Reid-Hillview. This was discussed in detail by the County Counsel in August 2008 when the Board of Supervisors last publicly asked the Counsel to review options to shut down Reid-Hillview.

Since the county has no option to shut down the airport, applying for and accepting grants will help reduce the costs associated with operating the airport, ensuring the airports can be self sufficient.

- Apply for AIP grants to update and repair aging runways/taxiways/ramp/equipment
 - Newer infrastructure has lower maintenance costs
- Apply for retroactive grant to repay the \$3M loan from the county general fund
 - As suggested by Mr. Murdter, the airport is now eligible to obtain a grant to cover the \$3M loan from the general fund. This will reduce the amount of interest to be paid on the loan and the cost to the General Fund.
- Explore a grant or using entitlement funds to upgrade/repair the Terminal bathrooms
 - On review of the AIP rules, my understanding is AIP moneys may be used for the non-revenue generating/public use portions of terminal buildings, such as public bathrooms
- Leverage CalTrans programs to offset the County portion of the funds required for grant projects

Make Reid-Hillview a Valued Neighbor in East San Jose

The airport is located in a neighborhood/business area with thousands of commuters driving by each day. The airports users and management must be sensitive to the impacts of the airport on the surrounding community. We should also recognize the airport can be a real asset to that same community. The airports staff have provided great support for some community activities. Let's build on that strength.

- Work continuously with FBOs, flight clubs and CFIs to improve sensitivity to noise issues
 - The FBOs and flying clubs account for the vast majority of airport operations. They can enact club policies preventing noisy activities like pattern work after 10PM.
 - CFIs are the model and the guides for new pilots. CFI turn over is high due to strong demand for experienced pilots. The county should have a regular program of outreach to CFIs operating at the airport reminding them to teach and encourage noise sensitivity.
 - If that is not successful, consider a local ordinance to enforce noise abatement procedures similar to the City of San Jose's jet curfew.
- Continue support for DART - to be leveraged in case of local disaster
 - I am very happy that you are supporting the development of a Disaster Airlift Response Team at Reid-Hillview. Developing DART at Reid-Hillview will directly benefit the East San Jose community in case of a natural disaster.
- Continue support for events like Airport Day and STEAM activities
 - Airport Day and the STEAM events are wonderful ways to bring the community into the airport, not to mention the benefit of developing interest Science, Technology, Engineering and Arts careers in the children of East San Jose. These events are well attended and enjoyed by all. Please continue them.
- Beautify - invest in drought resistant landscaping along Capitol and Tully, redo airport entrance
 - The airport is one of the least attractive properties in the Evergreen area. It doesn't have to remain that way. Small investment into improving the appearance of the property will go a long way to increasing community acceptance and pride in the airport.
- Relocate derelict, but rent paying, aircraft away from direct view of Capitol and Cunningham
 - Having these derelict aircraft sitting close to the main thoroughfares supports the status of the airport as an "eye sore" instead of an asset. I understand these are rent paying aircraft and the income is valuable. Please move those aircraft to an area of the airport not so easily viewed from the street.
 - Require FBO owners/lease holders to keep non-airworthy aircraft away from direct view of the streets.

- Create a small park in the Runway Turning Zone portion of Capitol/Tully parcel
- Promote the availability of terminal facilities to local nonprofit and community organizations
 - Most people do not know the terminal facilities are available to non-aviation community groups. Let them know this is a public resource available to all.
- Upgrade terminal to support a restaurant
 - The upstairs restaurant space is a unique opportunity to bring neighbors to the airport to enjoy good food and a great view of the aircraft operating at RHV. I've seen restaurants with similar views at other airports and those restaurants are usually packed with people enjoying the food and the view of the planes.
 - A restaurateur would have the captive audience of flight training students, CFIs and corporate pilots without cars whose only other food option is stale sandwiches from the Airport Shoppe which isn't open on weekends.
 - The restaurants in Eastridge Mall and on the corner of Capital and Tully have a steady stream of people during lunch, evenings and all day on weekends. Some of that stream can be redirected to a unique restaurant at the airport.

As you know, I sincerely believe the airport is a valuable and strategic asset to Santa Clara County - from it's roll as a reliever airport for San Jose International to it's roll as a training airport for the professional pilots of the future to it's availability as a base for life saving and community benefiting activities. I understand a government run airport has constraints that do not exist for a privately run business. However, I hope some of these suggestions can be implemented and help make the airport the self sufficient and strategic asset I believe it can be.

Please feel free to contact me with any questions you may have regarding these suggestions or anything else I may be able to help with as you move forward with developing the business plan update.

Sincerely yours,

Anissa Mohler
 anissa@aoaflight.com
 FAA Certificated Flight Instructor and Small Business Owner
 AOPA Distinguished CFI 2017
 Owner and Operator of AOA, LLC.
 CFI, CFII, AGI, IGI

cc: Keith Graham, Santa Clara County Airports Commission

Saleed B. 03-01-18

3-16-18 14:04

3/01/18

Good afternoon!

My name is SB. I'm the Comm Assistant of Katherine Smith Elementary one of the 18 schools of Evergreen School district.

I'm here today on behalf of the KS community, coworkers and my own mother.

Affected by the housing issues.

On top of all the distress and fears our community suffers from, they also struggle with trying to find a place to live. Housing for Low income families needs to be provided. People financially stable have options, our community does not. As a comm asst, I provide resources, phone numbers, magazines titles to families, only to find out that there is a waiting list, or prices are not afford. These families end up living with friends, relatives or in their cars.

Like I said, I provide resources, you have the power to make to provide affordable housing for them. Please do something for our families. Si se puede!

Thank you!

Please consider any future development around the airport as to how it will make the airport a pride and centerpiece of this community. Like "Transit Oriented Development" around public transit nodes. Consider "Airport Oriented Development" around the airport. ~~the~~ ~~to~~

For example, within the scope of this business plan, develop the swift avenue corner property as an airport-connected fly in destination restaurant and new terminal building with a bridge/people mover to Eastridge and bus/light rail/EROT station. Find developers who "get" airport oriented development.

Bryson D 03-01-18

I'm not from around the area so I can't really understand what people go through around here but based off of what I've seen, I think it would be beneficial to keep Reid Hillview up and running because it's been my dream since I was a kid to be a pilot and Reid Hillview is the only way I can do that. The needs of the community around the airport should be met too with this business plan which is why I feel like the empty space owned by Reid Hillview should be used for affordable housing because that seems like the #1 concern in this community. When it comes to upgrading Reid Hillview, it'd be nice to see more vegetation especially along the road that runs next to Capital Expressway and a sidewalk so people don't have to walk across dirt to get into the airport. A restaurant would be a great idea as well as indoor skydiving like someone else mentioned. I think we need to look at San Carlos as an example because the woman that talked about it made it seem really nice and I think Reid Hillview is more than capable of becoming the next San Carlos if someone from Hillview went out and made some observations. Hopefully my ideas will be taken into consideration. Oh, and an air show would bring in a lot of business but I'm not sure if something like that could happen!

① Please provide some perspective in your report. Specifically, how much funding has Palo Alto, ^{airport} secured in the last ten years of federal airport grant money? How much has our county airports applied for & received? Year-by-year table analysis.

② We've heard about the issues with restoring the current terminal building to a restaurant. Several local airports (KPAO, KSQL, KHWD) all have sustainable restaurants. Some have more than one (KSQL). What has our county management employees done to research new building construction incentives instead of renovating the terminal upper floor?

- ③. Where else in the Bay Area or East side San Jose area can residents have the opportunity to learn blue & color trades of skill? These jobs pay more than the service-level jobs held by many East side residents. Investigate a partnership between ^{aviation} maintenance facilities, SJSU, & employers for an apprenticeship program to support Career Technical Education? What about partnering with local community colleges?
- ④. Where are the notes from the previous public meeting?
- ⑤. Why weren't airport tenants emailed about this meeting? The failure of airport managements →

REQUEST TO SPEAK

SANTA CLARA COUNTY ROADS & AIRPORTS DEPARTMENT

AIRPORT'S BUSINESS PLAN UPDATE MEETING

Donald Meyer Elementary School, March 1st, 2018

This card is used to request a public comment or ask a question during the meeting. The information below is for informational purposes only and is not required. Place cards in the box at the front of the room.

NAME (print) _____

ADDRESS _____ CITY _____ ZIP _____

HOME PHONE _____ WORK PHONE _____

EMAIL ADDRESS _____

*communication skills is hurting
relations between the community
& airport users.*

3-16-18 14:04

Phil M. 03-20-18

**Winter Faith Collaborative
484 E. San Fernando Street
San Jose, CA 95112**

MARCH 20, 2018

Harry Freitas, Director of County Roads and Airports
2500 Cunningham Avenue
San Jose, CA 95148

County Airports Study / Reid-Hillview Business Plan

Dear Director Freitas,

We are submitting this letter in comment to your request for feedback on County of Santa Clara Airport Study and Reid-Hillview Business Plan Recommendations and Reports.

We are a network of faith communities committed to providing shelter and services to and advocating for the unhoused population in Santa Clara County. Several members of our network attended your presentation on March 1st regarding the upcoming Business Plan.

It is our view that the short-term plan should include capital improvements limited only to those urgent needs to maintain safety and comfort for businesses and users of the airport. A long-term plan should include the re-purposing of the Reid-Hillview 180-acre property for housing for longtime residents and families who are facing displacement in San Jose. Because of the jobs-housing imbalance many families are being forced out of the area due to high rents and the shortage of housing for those in almost all income levels.

The California Legislature recently passed AB 932, which allows the County to declare a sheltering emergency and move quickly to house individuals and families who are unhoused on county-owned land and avoid the typical land use restrictions and approval processes. *Under this law, during a crisis, the county has the following requirement:* “(a) (4) On or before July 1, 2019, the city, county, or city and county shall develop a plan to address the shelter crisis, including, but not limited to, the development of homeless shelters and permanent supportive housing, as well as onsite supportive services. The county shall make the plan publicly available”

Recently, the County Board of Supervisors unanimously declared just such a shelter crisis and directed staff to initiate both emergency shelter planning process and search for appropriate county sites to establish additional housing immediately, under the provisions of AB 932. The Reid Hillview site should be part of the inventory of real property owned by the county to be considered for both emergency sheltering and long term affordable housing.

I, along with other of our members, attended at the meeting you held on March 1st at Meyer Elementary School regarding development of an updated Reid-Hillview Airport Business Plan.

It seemed clear that the majority of the neighbors, as well as other San Jose residents who spoke, were in favor of asking the Board to strongly consider use of the property for housing.

Our group of communities works collectively, based on the commitment to house our neighbors who live outside, to advocate for better overall housing solutions. We have experienced an increase in the numbers who have shown up at our doors seeking housing help over the last 3 years, many of them working individuals with families. Because of this, we recognize that the housing crisis is real and creates great harm not only the health and welfare of unhoused people but also to the whole community. Medical studies have shown that living outdoors has shortened the average life span by 25 years - a number that currently stands at 54 years old.

Beyond this, the housing shortage in our County restricts local economic development, job opportunities and business growth. Many families are leaving our valley for more affordable areas, resulting in splitting up families generationally, breaking down family stability and with this, community stability and cohesiveness. This is not to mention the loss of a trained and valuable labor force needed to maintain economic health and vitality.

We urge the County to prepare plans for Reid-Hillview Airport to wind down the use of these 180 acres as an airport and convert it to provide adequate affordable housing for current residents of this neighborhood and the entire east/south regions of San Jose.

Because the County Board of Supervisors has taken great steps to pass Measure A affordable housing funding and to declare a homeless shelter crisis, it must take the next relevant step: To identify the Reid-Hillview site along other county underused land holdings to address the urgent need for housing.

We urge that you include in your plan a provision to wind down the use of the airport, resolve any financial encumbrances and to find ways to end the relationship with the FAA, all within the short-term business plan that you are preparing.

We appreciate your hosting the March 1st community meeting and your request for public input. We are grateful for your ongoing efforts. Winter Faith Collaborative is committed to informing our member communities about this issue and to stay engaged with your process. Our hope to help the County meet its overall goals and responsibility to keep all residents to the community safe and healthy. Please let me know how we can support this important effort going forward.

Feel free to contact me to discuss these issues and recommendations at your convenience.

Sincerely,

Phil Mastrocola
Winter Faith Collaborative
Pamastrocola@aol.com
408-839-9815

Bud B. 04-03-18

To whom it may concern,

My name is Bud Beacham, and I have lived in East San Jose since July 1990. During that time I have become quite familiar with Reid-Hillview (RHV), and its impact on the neighborhood and the quality of life for East San Jose residents. Currently, I am also an Airport Commissioner, but these comments are made as a private citizen living in East San Jose in regard to the upcoming 2018 RHV Master Plan.

I will just be providing a few brief points on various areas, and links to source. Most data is from either the FAA, or the General Aviation Manufacturers Association (GAMA).

Since RHV is a recreational airport, the aircraft using this airport are what is known a piston engine aircraft, not turbine (jets) aircraft. So, my comments will focus on piston engine aircraft, and the private pilot and student pilot population.

Piston Aircraft Demand:

According to the latest (2016) GAMA statistical handbook, in 2016, piston airplane shipments fell to 1,019 units compared to 1,056 units the prior year.

“In 2016, piston airplane shipments fell to 1,019 units compared to 1,056 units the prior year. The decline in shipments was 4.9 percent for the same reporting companies.”

[3, page 10]

Additionally, the FAA forecasts declining piston engine aircraft into the future. This is the type of aircraft used at RHV.

“The U.S. active general aviation fleet is anticipated to remain stable over the next 20 years, growing less than 0.5 percent in total through 2038, according to the latest FAA forecast. This stability is anticipated to come on the strength of the turbine aircraft and helicopter markets, which are expected to offset **declines in the piston aircraft fleet**, the agency added.” [5]

Basically, they are saying jet sales will be what causes any increase in GA aircraft, and piston engine aircraft will continue to decline in numbers.

“The FAA cited stronger U.S. GDP and corporate profits as drivers of the turbine growth, but in turn **believes “unfavorable pilot demographics, overall increasing cost of aircraft ownership, coupled with new aircraft deliveries not keeping pace with retirements of the aging fleet” will dampen the piston market.**”

[5]

Pilot Population:

In regard to the pilot population, GAMA states in their 2016 statistical handbook that

“The U.S. active pilot population continued its downward trajectory in 2016 and reached one of its lowest numbers in decades at 584,362 pilots at the end of 2015, based on preliminary data. There was, however, an uptick in the number of student pilot certificates held at the end of 2016 (128,501

compared to 122,749 the prior year). The number of active private pilots decreased by 4.9 percent to 162,313 pilots." [3, page 10]

I will return to these two statements, 'There was, however, an uptick in the number of student pilot certificates' and 'The number of active private pilots decreased by 4.9 percent to 162,313 pilots' a little later.

According to AOPA research, most people start flight lessons for recreational reasons.

"Recreational goals are the most common reason for learning to fly and most students learn outside the Part 141 environment." [10, page 44]

This means they are learning for fun, not to be a future airline pilot.

According to AOPA, the dropout rate for student pilots appears to approach 80%.

"Approximately 60 percent of those who earn a student pilot certificate never earn a higher pilot certificate (e.g., private, recreational, or sport). And many more drop out before ever obtaining a student pilot certificate—**placing the overall dropout rate at an estimated 70 to 80 percent.**" [10, page 2]

However, since AOPA is an aviation advocacy organization, I suspect the dropout numbers are lower than what is really occurring. I suspect the real dropout rate is close to a 100%. Additionally, there is an equally high dropout rate for private pilots after they get their license. At some point, many just stop flying due to a variety of reasons. This has been estimated to be 50% after 5 years.

In regard to the increase in student pilots and activity at RHV, there are two main reasons for the increase.

First, the FAA has changed to expiration date for student pilot certificates, and this has resulted in an increase in the current numbers. We must remember that just because one has a student pilot certificate does not mean that this person is actively using it. They can have dropped out of training, but are still being counted as student pilots.

"In July 2010, the FAA issued a rule that increased the duration of validity for student pilot certificates for pilots under the age of 40 from 36 to 60 months. This resulted in the increase in active student pilots to 119,119 from 72,280 at the end of 2009. Starting with April 2016, there is no expiration date on the new student pilot certificates, which generates a cumulative increase in the numbers." [20, Table 4]

Second, as mentioned above from AOPA research, the majority of these students are doing this for a recreational experience. Generally, recreation is done with surplus income, and surplus income results from a good economy. This is our current economic state, but we all know that at some point the economy will again go into recession. When that occurs, people will cut back on their recreational spending, and the result will be a large reduction in general aviation activity. Recreational dollars will be spent on much less expensive activities.

This helps to explain the decrease in pilot totals in Santa Clara County over the last ten years. I have been downloading FAA pilot statistics over the last ten years and these are the results. While the actual

FAA data is attached, I am just going to look at the Student Pilot and Private Pilot numbers, since a Student Pilot will transition to a Private Pilot if they do not dropout, and pass the FAA test.

Date	Private Pilot	Student Pilot
07/01/2009	1955	412
02/01/2010	1881	386
03/01/2011	1801	571
01/01/2012	1741	538
01/01/2013	1627	562
01/01/2014	1548	571
01/01/2015	1538	590
01/01/2016	1513	627
01/01/2017	1382	691
01/01/2018	1357	808

Basically, this shows that while the student population has remained relatively consistent, the Private Pilot population continues to decrease. I suspect this reflects both the high dropout rate of student pilots, and private pilots who decide to stop flying. The student pilot increase in 2016, 2017, 2018 is due to the FAA changes in student pilot certificates. They no longer expire, so it gives the impression there are more students than there actually are.

In regard to student pilots at RHV, my personal feeling is:

1. Nobody should be learning how to fly an airplane in the middle of a residential neighborhood.
2. Flight training is a completely incompatible activity with a residential neighborhood.
3. It is not the responsibility of SCC taxpayers to provide the airlines with pilots.
4. Why are we training Japanese, and other foreign nationals, how to fly at RHV?
5. This is why the county needs to stop accepting FAA Grant money. No flight schools should be operating at RHV.

Other Data:

Mostly from GAMA.

The GAMA/FAA data for 2016 shows that 63% of RHV operations are local. A takeoff, or landing equal one operation. A Local operation means the aircraft never leaves the pattern, basically it just flies in circles practicing takeoffs and landings. An itinerant operation is where the aircraft leaves the airport, or arrives at the airport from outside the pattern.

Year	Itinerant	Local	Total	Local Percentage
2016	55654	95541	151701	63

Aircraft Property Tax:

Please see the attached GAMA data showing that the average age of piston aircraft (**45.4 years**) is increasing, and so is the average of pilots.

One point that is brought up in airport discussions is that aircraft owners pay property tax to the county on their aircraft. While true, there is a glaring tax loophole for these aircraft. If an aircraft is older than 35 years, and is on display for a few times a year, the owner is given a tax exemption.

“This exemption provides a property tax exemption for "Aircraft of Historical Significance." For property tax purposes, "Aircraft of Historical Significance" means any aircraft which is an original, restored, or replica of a heavier than air powered aircraft which is 35 years or older....” [30]

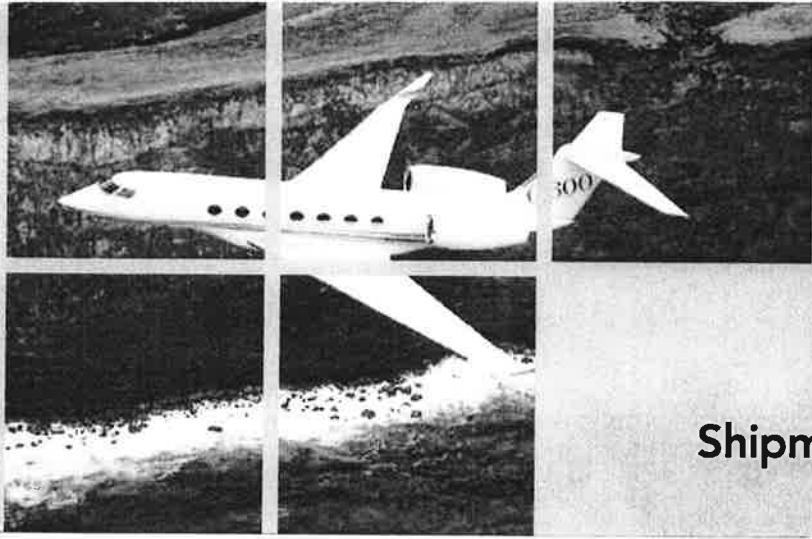
[3] https://gama.aero/wp-content/uploads/2016-GAMA-Databook_forWeb.pdf
<https://gama.aero/facts-and-statistics/statistical-databook-and-industry-outlook/>

[5] <https://www.ainonline.com/aviation-news/business-aviation/2018-03-21/faa-forecast-turbine-fleet-keep-ga-market-stable>

[10] http://download.aopa.org/epilot/2011/AOPA_Research-The_Flight_Training_Experience.pdf

[20] https://www.faa.gov/data_research/aviation_data_statistics/civil_airmen_statistics/
Use the 2017 Active Civil Airman Statistics

[30] https://www.boe.ca.gov/proptaxes/ahs_exemption.htm



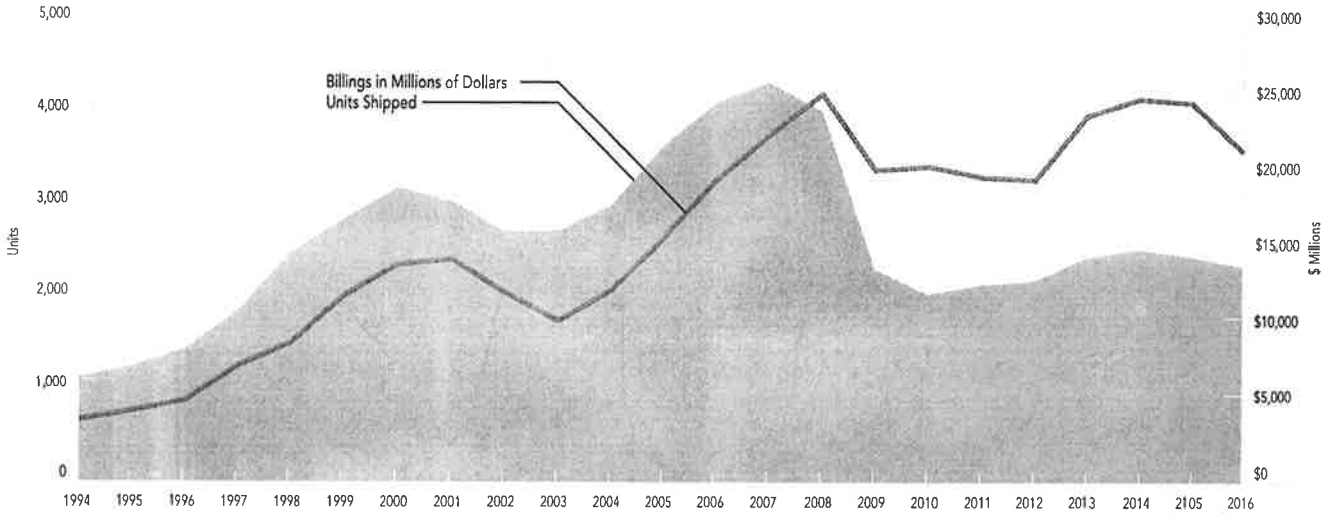
General Aviation Shipments and Billings

1.1 General Aviation Airplane Shipments by Type of Airplane Manufactured Worldwide (1994–2016)

Year	Grand Total	Single-Engine Piston	Multi-Engine Piston	Turboprop	Turboprop	Business Jet	Total Turbine
1994	1,132	544	77	621	233	278	511
1995	1,251	605	61	666	285	300	585
1996	1,437	731	70	801	320	316	636
1997	1,840	1,043	80	1,123	279	438	717
1998	2,457	1,508	98	1,606	336	515	851
1999	2,808	1,689	112	1,801	340	667	1,007
2000	3,147	1,877	103	1,980	415	752	1,167
2001	2,998	1,645	147	1,792	422	784	1,206
2002	2,677	1,591	130	1,721	280	676	956
2003	2,686	1,825	71	1,896	272	518	790
2004	2,962	1,999	52	2,051	319	592	911
2005	3,590	2,326	139	2,465	375	750	1,125
2006	4,054	2,513	242	2,755	412	887	1,299
2007	4,277	2,417	258	2,675	465	1,137	1,602
2008	3,974	1,943	176	2,119	538	1,317	1,855
2009	2,283	893	70	963	446	874	1,320
2010	2,024	781	108	889	368	767	1,135
2011	2,120	761	137	898	526	696	1,222
2012	2,164	817	91	908	584	672	1,256
2013	2,353	908	122	1,030	645	678	1,323
2014	2,454	986	143	1,129	603	722	1,325
2015	2,331	946	110	1,056	557	718	1,275
2016	2,262	890	129	1,019	582	661	1,243

Source: GAMA

FIGURE 1.1 General Aviation Airplane Shipments and Billings Worldwide (1994–2016)



Source: GAMA

General Aviation Shipments and Billings

1.4c Worldwide Piston-Engine Airplane Shipments by Manufacturer (2003–2016) Continued

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Maule Air Incorporated	31	25	27	38	36	27	7	4	4	9	6	2	13	3
M-4-180A, V	-	-	1	7	5	-	-	-	-	-	-	1	-	-
M-7-235, A, B, C	12	8	11	8	6	7	1	3	-	1	-	1	-	1
M-7-260, C	4	3	4	2	4	4	4	-	1	3	4	-	-	1
MT-7-235	7	1	2	9	2	6	2	-	-	1	-	-	-	-
MT-7-260	-	-	2	4	-	-	-	-	-	-	-	-	-	-
MX-7-180, A, B, C, AC	6	5	3	4	6	4	-	1	1	1	1	-	12	1
MXT-7-160	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MXT-7-180, A, AC	2	8	4	4	12	6	-	-	2	3	-	-	-	-
M-8-235	-	-	-	-	1	-	-	-	-	-	-	-	-	-
M-9-235	-	-	-	-	-	-	-	-	-	-	1	-	1	-
Mooney International Corporation	36	37	85	75	79	65	19	2	0	0	0	1	11	7
M20M Bravo	5	9	20	5	1	-	-	-	-	-	-	-	-	-
M20R Ovation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M20R Ovation 2	30	28	65	63	20	21	4	0	0	0	0	0	3	1
M20S Eagle 2	1	-	-	-	-	-	-	-	-	-	-	-	8	-
M20TN Acclaim	-	-	-	7	58	44	15	2	0	0	0	1	0	6
Pacific Aerospace Corporation	0	6	0	0	0	0	0	0	0	0	0	0	0	0
CT/AE Airtrainer	-	6	-	-	-	-	-	-	-	-	-	-	-	-
Piper Aircraft, Inc.	205	163	193	189	168	216	61	135	104	126	154	136	111	93
PA-28-161 Warrior III	31	18	37	19	27	23	8	23	15	20	2	3	20	5
PA-28-181 Archer III	49	19	16	29	16	7	1	21	2	4	48	45	25	42
PA-28R-201 Arrow IV	16	12	9	5	8	1	0	4	0	2	1	8	5	7
PA-32-301FT Piper 6X	10	24	18	10	12	0	-	-	-	-	-	-	-	-
PA-32-301XTC Piper 6XT	11	14	16	11	-	-	-	-	-	-	-	-	-	-
PA-32R-301 Saratoga II HP	9	9	8	10	-	-	-	-	-	-	-	-	-	-
PA-32-301T Saratoga II TC	28	31	37	37	39	12	-	-	-	-	-	-	-	-
PA-34-220T Seneca V	28	10	12	26	22	27	7	22	21	17	22	10	8	3
PA-44-180 Seminole	16	11	29	11	14	24	5	16	16	22	23	22	17	10
PA-46-350P Malibu Mirage/M350	7	15	11	31	30	21	7	26	33	49	42	37	34	26
PA-46R-350T Matrix	-	-	-	-	-	101	33	23	17	12	16	11	2	0
Quartz Mountain Aerospace	0	0	0	0	0	11	0	0	0	0	0	0	0	0
QMA 11E	-	-	-	-	-	11	-	-	-	-	-	-	-	-
Symphony Aircraft (prev. OMF)	19	1	10	5	0	0	0	0	0	0	0	0	0	0
Symphony 160	19	1	10	5	-	-	-	-	-	-	-	-	-	-
TECNAM Aircraft	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	197	190	191	191
ASTM - LSA	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	108	108	102	73
P2002JF	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	33	18	20	33
P92JS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	15	7	4	7
P2002JR	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2	0	0	0
P2008JC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	19	36	24	24
P2006T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	20	21	21	32
P2010P Twenty Ten	-	-	-	-	-	-	-	-	-	-	-	-	20	22
Textron Aviation (Beechcraft)	82	93	99	118	111	103	56	51	54	36	70	72	41	45
Beechcraft Bonanza A/G36	55	62	71	80	73	63	36	22	24	12	35	32	23	25
Beechcraft Bonanza B36TC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beechcraft Baron B/G58	27	31	28	38	38	40	20	29	30	24	35	40	18	20
Textron Aviation (Cessna Aircraft)	588	654	822	865	807	733	355	261	413	283	206	220	271	217
CE-162 SkyCatcher	-	-	-	-	-	-	1	22	168	19	-	-	-	-
CE-172R Skyhawk	58	32	37	87	133	55	16	8	26	27	0	0	-	-
CE-172S Skyhawk	291	204	314	322	240	228	110	77	77	113	106	155	143	100
CE-182T Skylane	118	196	241	140	161	109	58	64	40	48	13	0	33	50
CE-T182T Turbo Skylane	47	133	118	187	140	105	75	36	37	19	26	0	-	-
CE-206H Stationair	16	22	29	25	20	17	3	4	11	16	3	0	-	-
CE-T206H Turbo Stationair	58	67	83	104	111	95	46	42	53	40	37	43	51	36
CE-350 Corvalis	-	-	-	-	1	14	5	1	0	1	0	0	-	-
CE-240 TTx (prev. CE-400 Corvalis TTx)	-	-	-	-	1	110	41	7	1	0	21	22	44	31
Tiger Aircraft	18	19	15	3	0	0	0	0	0	0	0	0	0	0
AG-5B Tiger	18	19	15	3	-	-	-	-	-	-	-	-	-	-
WACO Classic Aircraft	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5	6	7	11	10	7
2T-1A-2	-	-	-	-	-	-	-	-	-	-	1	6	6	3
YMF-5D	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5	6	6	5	4	4
XtremeAir GmbH	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9	9	8	9	0	0
XA41	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4	2	2	0	n/a	n/a
XA42	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5	7	6	9	n/a	n/a
Total Number of Airplanes	1,896	2,051	2,465	2,755	2,675	2,119	977	912	1,207	1,072	1,282	1,378	1,265	1,142
% Change	10.2%	8.2%	20.2%	11.8%	-2.9%	-20.8%	-53.9%	-6.7%	n/a	-11.2%	n/a	7.5%	-8.2%	-9.7%
Total Billings for Airplanes (\$M)	545	692	805	857	897	945	442	415	441	428	571	635	601	661
% Change	12.9%	27.0%	16.3%	6.5%	4.7%	5.3%	-53.1%	-7.7%	n/a	-3.0%	n/a	11.1%	-5.3%	10.0%

Table 1.4c includes all piston engine airplanes delivered by the manufacturers listed, including type-certified piston-engine airplanes under airworthiness standards other than Part/CS-23, such as those type certified under EASA CS-Very Light Aircraft and CS-Light Sport Aircraft, as well as Special Light Sport Aircraft.

Source: GAMA



1.5 U.S.-Manufactured General Aviation Airplane Shipments by Type (1947–2016)

Year	Single-engine Piston	Multi-engine Piston	Total Piston	Turboprop	Business Jet	Total Turbine	Company Reporting	Factory Net Billings (\$ Millions)
1947	15,594	n/a	15,594	-	-	-	15	\$58
1948	7,037	n/a	7,037	-	-	-	12	\$32
1949	3,405	n/a	3,405	-	-	-	11	\$18
1950	3,386	n/a	3,386	-	-	-	13	\$19
1951	2,302	n/a	2,302	-	-	-	12	\$17
1952	3,058	n/a	3,058	-	-	-	8	\$27
1953	3,788	n/a	3,788	-	-	-	7	\$34
1954	3,071	n/a	3,071	-	-	-	7	\$43
1955	4,434	n/a	4,434	-	-	-	7	\$68
1956	6,738	n/a	6,738	-	-	-	8	\$104
1957	6,118	n/a	6,118	-	-	-	9	\$100
1958	6,414	n/a	6,414	-	-	-	10	\$102
1959	7,689	6,849	7,689	-	-	-	9	\$130
1960	7,588	6,569	7,588	-	-	-	8	\$151
1961	6,756	5,995	6,756	-	-	-	8	\$124
1962	6,697	5,690	6,697	-	-	-	7	\$137
1963	7,569	6,248	7,569	-	-	-	7	\$153
1964	9,336	7,718	9,324	9	3	12	8	\$199
1965	11,852	9,873	11,653	87	112	199	8	\$318
1966	15,768	13,250	15,442	165	161	326	10	\$445
1967	13,577	11,557	13,330	149	98	247	14	\$360
1968	13,698	11,398	13,357	248	93	341	14	\$426
1969	12,457	10,054	12,132	214	111	325	14	\$585
1970	7,292	5,942	7,101	135	56	191	13	\$337
1971	7,466	6,287	7,330	89	47	136	11	\$322
1972	9,774	7,898	9,446	179	149	328	12	\$558
1973	13,646	10,780	13,193	247	206	453	12	\$828
1974	14,166	11,562	13,697	250	219	469	12	\$909
1975	14,056	11,439	13,555	305	196	501	12	\$1,033
1976	15,449	12,783	14,903	359	187	546	12	\$1,226
1977	16,907	14,057	16,252	428	227	655	12	\$1,488
1978	17,811	14,398	17,032	548	231	779	12	\$1,781
1979	17,050	13,286	16,129	639	282	921	12	\$2,165
1980	11,860	8,640	10,756	778	326	1,104	12	\$2,486
1981	9,457	6,608	8,150	918	389	1,307	12	\$2,920
1982	4,266	2,871	3,549	458	259	717	11	\$2,000
1983	2,691	1,811	2,228	321	142	463	10	\$1,470
1984	2,431	1,620	1,991	271	169	440	9	\$1,681
1985	2,029	1,370	1,563	321	145	466	9	\$1,431
1986	1,495	985	1,123	250	122	372	9	\$1,262
1987	1,085	613	700	263	122	385	9	\$1,364
1988	1,143	628	695	291	157	448	11	\$1,923
1989	1,535	1,023	1,110	268	157	425	11	\$1,804
1990	1,144	608	695	281	168	449	14	\$2,008
1991	1,021	564	613	222	186	408	14	\$1,968
1992	941	552	593	177	171	348	16	\$1,840
1993	964	516	555	211	198	409	16	\$2,144
1994	929	444	499	208	222	430	13	\$2,357
1995	1,077	515	576	255	246	501	13	\$2,842
1996	1,171	607	649	289	233	522	13	\$3,048
1997	1,562	898	984	236	342	578	12	\$4,593
1998	2,212	1,434	1,528	271	413	684	12	\$5,761
1999	2,530	1,634	1,748	265	517	782	13	\$7,843
2000	2,816	1,810	1,913	315	588	903	15	\$8,558
2001	2,631	1,581	1,728	303	600	903	14	\$8,641
2002	2,207	1,366	1,496	187	524	711	12	\$7,719
2003	2,137	1,519	1,590	163	384	547	13	\$6,434
2004	2,355	1,706	1,758	194	403	597	13	\$6,816
2005	2,857	2,024	2,095	240	522	762	13	\$8,667
2006	3,147	2,208	2,287	256	604	860	16	\$10,367
2007	3,279	2,097	2,174	290	815	1,105	16	\$11,941
2008	3,079	1,700	1,791	333	955	1,288	15	\$13,348
2009	1,585	770	802	269	514	783	13	\$9,082
2010	1,334	679	746	224	364	588	12	\$7,875
2011	1,465	639	706	395	364	759	16	\$8,266
2012	1,518	645	708	463	347	810	17	\$8,017
2013	1,615	674	754	527	334	861	17	\$11,069
2014	1,631	716	788	468	375	843	16	\$11,688
2015	1,592	740	783	420	389	809	17	\$11,982
2016	1,525	685	718	411	396	807	18	\$10,577

Source: GAMA



2.12 Average Age of Registered U.S. General Aviation Fleet (2007–2015)

Aircraft Type	Engine Type	Seats	Average Age in 2007 in Years	Average Age in 2008 in Years	Average Age in 2009 in Years	Average Age in 2010 in Years	Average Age in 2011 in Years	Average Age in 2012 in Years	Average Age in 2013 in Years	Average Age in 2014 in Years	Average Age in 2015 in Years
Single-Engine	Piston	1-3	38	48.1	-	-	-	-	-	-	-
		4	36	38.2	-	-	-	-	-	-	-
		5-7	32	33.5	-	-	-	-	-	-	-
		8+	43	49.3	-	-	-	-	-	-	-
		All	-	-	42.2	46.3	n/a	43.4	40.7	44.8	45.4
	Turboprop	All	14	13.6	16.1	15.2	n/a	14.9	12.5	13.5	13.2
	Jet	All	35	44.4	44.0	44.1	n/a	n/a	n/a	n/a	n/a
	Helicopter - Piston	All	-	-	-	n/a	n/a	20.8	17.1	21.4	21.5
	Helicopter - Turbine	All	-	-	-	n/a	n/a	22.9	22.3	22.1	22.4
	Multi-Engine	Piston	1-3	33	48.9	-	-	-	-	-	-
4			35	36.0	-	-	-	-	-	-	-
5-7			39	39.3	-	-	-	-	-	-	-
8+			40	41.6	-	-	-	-	-	-	-
All		All	-	-	41.2	39.0	n/a	40.2	38.5	41.9	42.5
Turboprop		All	27	28.8	28.0	27.0	n/a	26.1	25.2	27.6	27.2
Jet		All	16	16.2	17.0	16.2	n/a	15.3	14.7	15.8	15.8
Helicopter - Turbine		All	-	-	-	-	-	17.5	14.7	17.6	18.1
All Aircraft			35	39.3	39.5	37.3	n/a	35.1	33.2	36.7	36.9

Source: GAMA



2.2 Active U.S. General Aviation and On-Demand Part 135 Aircraft by Primary Use and Aircraft Type (2015)

Aircraft Type	General Aviation FAR Part 91 Use													On-Demand FAR Part 135 Use		
	Total Active (76.7% of 273,663)	Personal/ Recre- ational	Business (w/o crew)	Business (with crew)	Instruc- tional	Aerial Apps.	Aerial Obs.	Other Aerial App.	External Load	Other Work	Sight- seeing	Air Medical	Other	Air Taxi	Air Tours	Air Medical
Total All Aircraft	210,030	139,700	15,887	11,276	15,667	3,303	5,477	870	321	1,272	1,164	516	5,674	6,494	521	1,887
% Std. Error	1.4%	2.0%	1.6%	.9%	1.6%	1.0%	1.1%	0.9%	0.8%	1.5%	1.4%	1.5%	1.3%	0.7%	0.7%	0.6%
Piston Total	141,141	104,669	12,474	1,446	12,182	991	2,531	253	0	727	310	386	3,365	1,567	199	39
One-Engine Piston	127,887	97,811	9,964	705	10,800	958	2,121	196	0	714	294	328	2,908	913	173	2
Two-Engine Piston	13,254	6,859	2,510	741	1,382	34	411	58	0	13	16	57	457	654	26	36
Turboprop Total	9,712	1,263	1,237	2,342	162	1,729	278	229	0	135	3	14	522	1,548	13	238
One-Engine Turboprop	4,391	600	544	410	43	1,713	23	115	0	36	0	4	298	545	13	49
Two-Engine Turboprop	5,321	663	693	1,932	119	16	255	113	0	100	3	10	224	1,003	0	189
Business Jet	13,440	1,537	1,047	6,814	185	0	37	64	0	186	0	9	696	2,675	0	190
Rotorcraft Total	10,506	1,277	336	640	1,603	521	2,482	299	321	43	133	81	379	684	291	1,417
Piston Total	3,286	903	207	48	1,215	210	251	22	8	3	117	0	232	61	8	0
Turbine Total	7,220	374	129	591	388	311	2,231	278	313	40	15	81	146	623	283	1,417
- One-Engine Turbine	5,458	311	122	111	349	272	2,122	258	228	30	15	16	99	421	272	833
- Two-Engine Turbine	1,762	63	7	481	40	38	109	20	86	10	0	65	48	202	11	584
Gliders	1,870	1,455	0	0	360	0	0	0	0	0	40	0	15	0	0	0
Lighter-Than-Air	3,071	2,268	9	4	158	0	0	0	0	27	582	2	8	0	13	0
Experimental Total	27,922	25,284	739	31	697	59	128	22	0	147	96	23	669	19	6	4
Amateur-Built	21,195	19,438	616	5	541	36	76	3	0	61	83	21	313	0	0	2
Exhibition	1,966	1,613	47	10	43	4	0	5	0	42	0	2	199	0	0	0
Exp. Light-Sport	3,942	3,730	10	0	88	2	23	0	0	21	2	0	66	0	0	0
Other Experimental	820	503	66	15	26	17	29	14	0	23	10	0	90	19	6	2
Special Light-Sport	2,369	1,948	45	0	320	2	22	2	0	7	0	0	21	2	0	0

Source: FAA Survey

2.3 U.S. General Aviation and On-Demand Part 135 Total Hours Flown by Use and Aircraft Type (2015)

Aircraft Type	Total Hours	General Aviation FAR Part 91 Use											On-Demand FAR Part 135 Use			
		Personal/ Recre- ational	Business (w/o crew)	Business (with crew)	Instruc- tional	Aerial Apps.	Aerial Obs.	Other Aerial App.	External Load	Other Work	Sight- seeing	Air Medical	Other	Air Taxi	Air Tours	Air Medical
Total All Aircraft	24,141,864	7,437,602	1,838,773	2,384,200	4,648,448	941,208	1,411,526	178,405	176,364	240,751	161,575	77,055	1,080,165	2,524,126	328,102	713,564
% Std. Error	1.0%	1.2%	2.4%	3.0%	3.1%	5.9%	5.1%	8.6%	13.9%	10.8%	8.8%	13.8%	3.3%	3.8%	14.4%	6.8%
Piston Total	12,824,828	5,609,359	1,360,051	197,236	3,701,905	159,508	661,741	41,257	-	111,271	70,223	33,183	374,628	435,794	59,932	-
One-Engine Piston	11,217,005	5,183,934	1,122,293	90,023	3,238,268	156,541	562,895	31,246	-	110,368	67,141	25,448	315,529	255,007	56,042	-
Two-Engine Piston	1,607,823	425,425	237,758	107,214	463,637	2,967	98,846	10,011	-	902	3,082	-	59,099	180,787	3,890	6,469
Turboprop Total	2,537,913	190,019	174,073	437,374	65,930	631,979	77,694	50,374	-	55,177	707	4,241	116,301	620,101	5,934	108,009
One-Engine Turboprop	1,237,144	81,335	73,430	112,781	8,945	613,093	10,942	25,077	-	11,880	198	1,395	38,177	234,271	5,891	19,728
Two-Engine Turboprop	1,300,769	108,684	100,643	324,593	56,984	18,886	66,751	25,297	-	43,297	-	2,846	78,124	385,830	43	88,281
Business Jet	3,837,291	295,692	194,395	1,693,383	24,305	-	7,316	8,109	-	33,911	-	4,608	420,294	1,068,684	-	86,251
Rotorcraft Total	3,294,118	103,306	40,595	51,881	678,961	133,753	644,107	76,390	175,526	24,086	52,377	33,836	118,676	391,870	259,332	509,420
Piston Total	797,870	54,520	16,976	8,952	515,036	36,708	79,466	2,049	2,635	878	43,857	-	13,122	17,275	6,396	-
Turbine Total	2,496,247	48,786	23,619	42,929	163,925	97,045	564,641	74,341	172,891	23,208	8,520	33,836	105,554	374,595	252,936	509,420
- One-Engine Turbine	1,912,091	40,665	22,032	20,966	150,883	86,830	526,068	62,885	124,015	18,793	7,684	11,005	68,292	241,689	246,502	283,781
- Two-Engine Turbine	584,156	8,120	1,587	21,963	13,042	10,215	38,573	11,456	48,877	4,415	836	22,832	37,262	132,906	6,434	225,640
Gliders	94,370	60,879	-	-	27,132	-	-	-	-	-	-	5,005	-	-	-	-
Lighter-Than-Air	67,587	37,686	-	-	2,738	-	-	-	-	-	-	-	-	-	-	-
Experimental Total	1,294,985	1,024,594	64,853	-	84,509	-	-	-	-	14,905	8,879	-	44,292	-	-	-
Amateur-Built	999,670	821,049	55,818	-	68,605	-	3,993	-	-	-	7,016	-	27,131	-	-	-
Exhibition	76,331	58,086	672	-	2,512	-	-	-	-	-	882	-	7,180	-	-	-
Exp. Light-Sport	131,860	115,665	-	-	5,206	-	-	-	-	-	-	-	-	-	-	-
Other Experimental	87,124	29,794	5,697	-	8,187	6,452	12,102	1,454	-	4,627	942	-	5,288	6,862	-	-
Special Light-Sport	190,772	116,067	4,214	-	62,969	-	1,616	-	-	476	139	-	4,265	-	-	-

Source: FAA Survey



2.4 Active U.S. General Aviation and On-Demand Part 135 Aircraft by Type (1996–2015) and Forecast (2016–2025)

Year	Total Aircraft	Airplane			Rotorcraft		Balloons, Dirigibles, Gliders	Experimental	Light-Sport Aircraft		
		Piston	Turboprop	Business Jet	Piston	Turbine			Total	Experimental	Special
1996	191,129	153,551	5,716	4,424	2,507	4,063	4,244	16,625	-	-	-
1997	192,414	156,056	5,619	5,178	2,259	4,527	4,092	14,680	-	-	-
1998	204,710	162,963	6,174	6,066	2,545	4,881	5,580	16,502	-	-	-
1999	219,464	171,923	5,679	7,120	2,564	4,884	6,765	20,528	-	-	-
2000	217,534	170,513	5,762	7,001	2,680	4,470	6,701	20,407	-	-	-
2001	211,446	163,314	6,596	7,787	2,292	4,491	6,545	20,421	-	-	-
2002	211,244	161,087	6,841	8,355	2,351	4,297	6,377	21,936	-	-	-
2003	209,708	160,938	7,689	7,997	2,123	4,403	6,008	20,550	-	-	-
2004	219,426	165,189	8,379	9,298	2,315	5,506	5,939	22,800	-	-	-
2005	224,352	167,608	7,942	9,823	3,039	5,689	6,454	23,627	170	-	-
2006	221,942	163,743	8,063	10,379	3,264	5,895	6,278	23,047	1,273	-	-
2007	231,607	166,907	9,514	10,385	2,769	6,798	5,940	23,228	6,066	-	-
2008	228,663	163,013	8,906	11,042	3,498	6,378	5,652	23,364	6,811	-	-
2009	223,877	157,123	9,055	11,268	3,499	6,485	5,480	24,419	6,547	5,077	1,470
2010	223,370	155,419	9,369	11,484	3,588	6,514	5,684	24,784	6,528	4,878	1,650
2011	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2012	209,034	143,160	10,304	11,793	3,292	6,763	5,006	26,715	-	4,631	2,001
2013	199,927	137,655	9,619	11,637	3,137	6,628	4,278	24,918	-	4,157	2,056
2014	204,408	139,182	9,777	12,362	3,154	6,812	4,699	26,191	-	4,204	2,231
2015	210,030	141,141	9,712	13,440	3,286	7,220	4,941	27,922	-	3,942	2,369
Forecast											
2016	203,425	137,080	9,420	12,635	3,340	7,200	4,570	26,590	-	-	2,590
2017	203,300	136,095	9,310	12,870	3,435	7,410	4,560	26,850	-	-	2,770
2018	203,200	135,150	9,235	13,125	3,525	7,615	4,550	27,055	-	-	2,945
2019	203,185	134,220	9,195	13,395	3,610	7,820	4,545	27,270	-	-	3,130
2020	203,195	133,295	9,190	13,680	3,690	8,020	4,525	27,485	-	-	3,310
2021	203,225	132,345	9,215	13,975	3,770	8,215	4,525	27,690	-	-	3,490
2022	203,340	131,405	9,270	14,285	3,850	8,410	4,520	27,925	-	-	3,675
2023	203,365	130,440	9,350	14,610	3,930	8,605	4,510	28,060	-	-	3,860
2024	203,555	129,470	9,465	14,965	4,010	8,795	4,500	28,310	-	-	4,040
2025	203,745	128,505	9,600	15,340	4,090	8,990	4,490	28,500	-	-	4,230
Average Annual Growth											
2016–25	-0.3%	-0.9%	-0.1%	1.3%	2.2%	2.2%	-1.0%	0.2%	-	-	6.0%

Key changes to survey methodology by year:

- 2003: Aircraft operating in commuter operations were excluded.
- 2004: The survey coverage was expanded for turbine airplanes and rotorcraft, accounting for part of the increase in hours.
- 2007: The estimate of Light-Sport Aircraft increased significantly due to mandatory registration.
- 2009: The FAA began publishing data for Special Light-Sport Aircraft separately.
- 2011: Data is unavailable at the time of publication.
- 2012: The general aviation survey results includes "Experimental Light-Sport" data in the "Experimental" category.

Source: FAA Survey and Forecast

The Federal Aviation Administration's (FAA) annual general aviation survey categorizes the uses of general aviation aircraft as follows:

- personal (and recreational) flying;
- business transportation without a paid crew (that is, an individual using an aircraft for business without a paid, professional crew); and
- business transportation with a paid, professional crew (previously called "corporate").

In addition, the following forms of business operations are included in general aviation operations:

- instructional flying (operations under the supervision of a flight instructor including solo flight);
- sight-seeing (commercial sight-seeing operations under FAR Part 91); and
- on-demand FAR Part 135 operations including air taxi (that is, charter), air tours, and airmedical operations.

2.9 Total Fuel Consumed and Average Fuel Consumption Rate by Aircraft Type (2015)

Fuel Type	Fixed Wing			Rotorcraft		Other Aircraft	Experimental	Special Light-Sport	Total All Aircraft
	Piston	Turboprop	Turbojet	Piston	Turbine				
Jet Fuel									
Avg. Rate (GPH)	36.6	75.7	277.2	-	51.4	-	41.8	-	154.9
Estimated Fuel Use (Thousand Gal.)	2,160.9	190,753.8	1,062,001.2	-	128,170.0	-	1,226.5	-	1,384,412.4
% Standard Error	19.7	1.2	1.0	-	1.3	-	19.0	-	0.9
100 Low-Lead									
Avg. Rate (GPH)	13.0	29.6	-	12.8	-	4.7	10.8	6.0	12.8
Estimated Fuel Use (Thousand Gal.)	154,169.8	515.8	-	10,004.7	33.9	9,535.1	413.9	413.9	174,933.6
% Standard Error	1.8	12.4	-	3.0	-	21.7	3.7	4.8	1.6
100 Octane									
Avg. Rate (GPH)	15.0	-	-	10.9	-	-	10.0	5.6	15.8
Estimated Fuel Use (Thousand Gal.)	7,909.2	-	-	71.7	-	-	266.2	12.6	8,923.9
% Standard Error	10.1	-	-	25.2	-	-	9.0	15.4	15.2
Automotive Gasoline									
Avg. Rate (GPH)	8.2	-	-	-	-	4.3	5.0	6.4	6.7
Estimated Fuel Use (Thousand Gal.)	2,896.7	-	-	-	-	13.8	1,541.7	765.9	5,229.4
% Standard Error	8.1	-	-	-	-	17.5	3.3	5.9	3.7
Other Fuel									
Avg. Rate (GPH)	12.1	81.7	-	-	-	18.0	12.2	-	18.0
Estimated Fuel Use (Thousand Gal.)	269.5	115.0	-	-	-	1,478.3	35.8	-	1,902.2
% Standard Error	19.8	37.6	-	-	-	8.1	25.3	-	9.0
Total Fuel Use									
Avg. Rate (GPH)	13.1	75.4	277.0	12.8	51.4	17.1	10.1	6.3	65.6
Estimated Fuel Use (Thousand Gal.)	167,406.1	191,394.0	1,062,904.5	10,181.2	128,185.1	1,527.2	12,605.3	1,198.2	1,575,401.4
% Standard Error	1.8	1.2	1.0	3.0	1.3	7.8	3.9	4.2	1.9

Some data points are suppressed or contain no reports of a type of aircraft using that fuel.

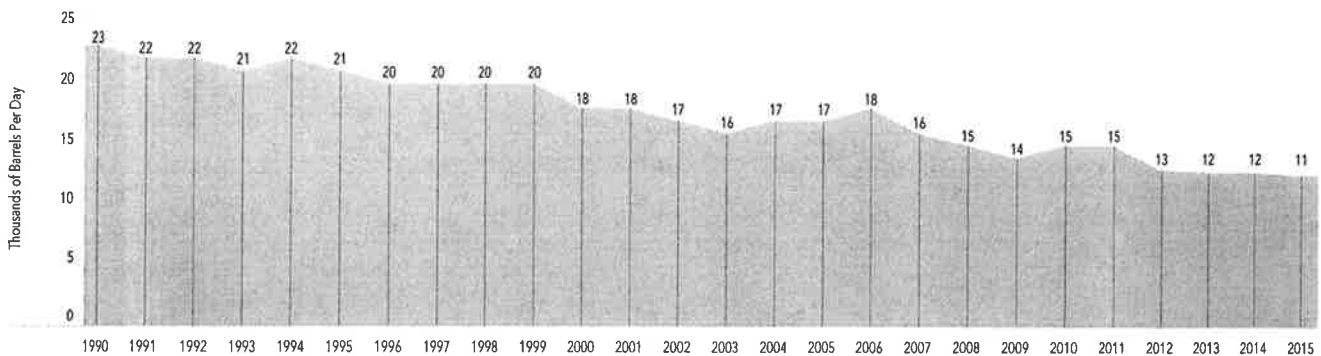
Source: FAA Survey

2.10 U.S. Refinery and Blender Net Production of Aviation Gasoline (1990–2015) (in Thousand Barrels Per Day)

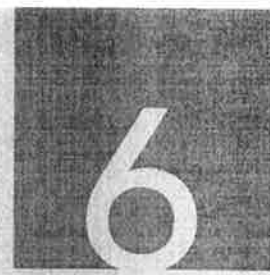
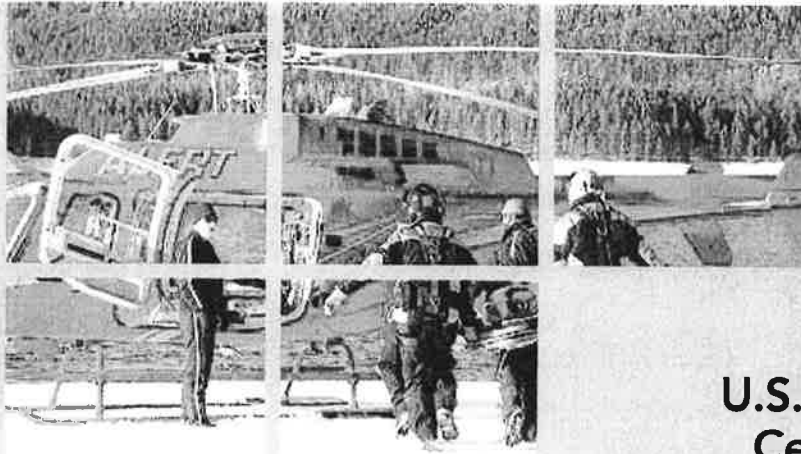
Year	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
1990	23	22	22	21	22	21	20	20	20	20
2000	18	18	17	16	17	17	18	16	15	14
2010	15	15	13	12	12	11	-	-	-	-

Source: U.S. Energy Information Administration

FIGURE 2.1 Refinery and Blender Net Production of Aviation Gasoline (1990–2015)



Source: U.S. Energy Information Administration



U.S. Pilot and Airmen Certificate Statistics

6.1 Active FAA Certificated Pilots (1980–2016)

Year	Pilot		Student ¹	Rec ²	Sport ³	Airplane ⁴			Rotorcraft (Only)	Glider (Only)	Lighter-Than-Air	Remote Pilot ⁵	Flight Instructor ⁶	Instrument Ratings ⁷	
	Total	% Women				Private	Commercial	ATP						Total	% of Total
1980	827,071	6.40%	199,833	-	-	357,479	183,442	69,569	6,030	7,039	3,679	-	60,440	260,461	41.5%
1981	764,182	6.24%	179,912	-	-	328,562	168,580	70,311	6,453	7,388	2,976	-	57,523	252,535	43.2%
1982	733,255	6.18%	156,361	-	-	322,094	165,093	73,471	7,034	7,842	1,360	-	62,492	255,073	44.2%
1983	718,004	6.08%	147,197	-	-	318,643	159,495	75,938	7,237	8,157	1,337	-	62,201	254,271	44.5%
1984	722,376	6.14%	150,081	-	-	320,086	155,929	79,192	7,532	8,390	1,166	-	61,173	256,584	44.8%
1985	709,540	6.13%	146,652	-	-	311,086	151,632	82,740	8,123	8,168	1,139	-	58,940	258,559	45.9%
1986	709,118	6.08%	150,273	-	-	305,736	147,798	87,186	8,122	8,411	1,133	-	57,355	262,388	47.0%
1987	699,653	6.09%	146,016	-	-	300,949	143,645	91,287	8,702	7,901	1,153	-	60,316	266,122	48.1%
1988	694,016	6.09%	136,913	-	-	299,786	143,030	96,968	8,608	7,600	1,111	-	61,798	273,804	49.1%
1989	700,010	6.05%	142,544	-	-	293,179	144,540	102,087	8,863	7,708	1,089	-	61,472	282,804	50.7%
1990	702,659	5.77%	128,663	87	-	299,111	149,666	107,732	9,567	7,833	n/a	-	63,775	297,073	51.8%
1991	692,095	5.91%	120,203	161	-	293,306	148,385	112,167	9,860	8,033	n/a	-	69,209	303,193	53.0%
1992	682,959	5.95%	114,597	187	-	288,078	146,385	115,855	9,652	8,205	n/a	-	72,148	306,169	53.9%
1993	665,069	5.93%	103,583	206	-	283,700	143,014	117,070	9,168	8,328	n/a	-	75,021	305,517	54.4%
1994	654,088	5.99%	96,254	241	-	284,236	138,728	117,434	8,719	8,476	n/a	-	76,171	302,300	54.2%
1995	639,184	5.67%	101,279	232	-	261,399	133,980	123,877	7,183	11,234	n/a	-	77,613	298,798	55.6%
1996	622,261	5.57%	94,947	265	-	254,002	129,187	127,486	6,961	9,413	n/a	-	78,551	297,895	56.5%
1997	616,342	5.59%	96,101	284	-	247,604	125,300	130,858	6,801	9,394	n/a	-	78,102	297,409	57.2%
1998	618,298	5.72%	97,736	305	-	247,226	122,053	134,612	6,964	9,402	n/a	-	79,171	300,183	57.7%
1999	635,472	5.81%	97,359	343	-	258,749	124,261	137,642	7,728	9,390	n/a	-	79,694	308,951	57.5%
2000	625,581	6.11%	93,064	340	-	251,561	121,858	141,596	7,775	9,387	n/a	-	80,931	311,944	58.6%
2001	612,274	5.82%	86,731	316	-	243,823	120,502	144,702	7,727	8,473	n/a	-	82,875	315,276	60.0%
2002	631,762	5.49%	85,991	317	-	245,230	125,920	144,708	7,770	21,826	n/a	-	86,089	317,389	58.2%
2003	625,011	6.12%	87,296	310	-	241,045	123,990	143,504	7,916	20,950	n/a	-	87,816	315,413	58.7%
2004	618,633	6.09%	87,910	291	-	235,994	122,592	142,160	8,586	21,100	n/a	-	89,596	313,545	59.1%
2005	609,737	6.11%	87,213	276	134	228,619	120,614	141,992	9,518	21,369	n/a	-	90,555	311,828	59.7%
2006	597,109	6.13%	84,866	239	939	219,233	117,610	141,935	10,690	21,597	n/a	-	91,343	309,333	60.5%
2007	590,349	6.12%	84,339	239	2,031	211,096	115,127	143,953	12,290	21,274	n/a	-	92,175	309,865	61.5%
2008	613,746	5.83%	80,989	252	2,623	222,596	124,746	146,838	14,647	21,055	n/a	-	93,202	325,247	61.4%
2009	594,285	6.39%	72,280	234	3,248	211,619	125,738	144,600	15,298	21,268	n/a	-	94,863	323,495	62.4%
2010	627,588	5.86%	119,119	212	3,682	202,020	123,705	142,198	15,377	21,275	n/a	-	96,473	318,001	63.0%
2011	617,128	6.39%	118,657	227	4,066	194,441	120,865	142,511	15,220	21,141	n/a	-	97,409	314,122	63.6%
2012	610,576	6.77%	119,946	218	4,493	188,001	116,400	145,590	15,126	20,802	n/a	-	98,328	311,952	64.2%
2013	599,086	6.78%	120,285	238	4,824	180,214	108,206	149,824	15,114	20,381	n/a	-	98,842	307,120	64.8%
2014	593,499	6.63%	120,546	220	5,157	174,883	104,322	152,933	15,511	19,927	n/a	-	100,993	306,066	65.5%
2015	590,038	6.66%	122,729	190	5,482	170,718	101,164	154,730	15,566	19,460	n/a	-	102,628	304,329	71.3%
2016	584,362	6.71%	128,501	175	5,889	162,313	96,081	157,894	15,518	17,991	n/a	20,362	104,224	302,241	67.2%

1. Includes pilots with an airplane-only certificate. Also includes those with an airplane and a helicopter and/or glider certificate. Prior to 1995, these pilots were categorized as private, commercial, or airline transport, based on their airplane certificate. Beginning in 1995, they are categorized based on their highest certificate. For example, if a pilot holds a private airplane certificate and a commercial helicopter certificate, prior to 1995, the pilot would be categorized as private; 1995 and after, as commercial.
 2. Glider pilots are not required to have a medical examination; however, the totals represent pilots who received a medical examination within the last 25 months.
 3. Not included in total.
 4. The instrument rating is as shown on pilot certificates but does not indicate an additional certificate. The percent of total does not include student, sport, and recreational pilots.

5. Recreational certificate was first issued in 1990.
 6. Sport pilot certificate was first issued in 2005.
 7. The Federal Aviation Administration (FAA) changed the validity of student pilot certificates in 2010 through an amendment to 14 CFR 61.19(b)(1), resulting in the duration of validity for student pilot certificates for pilots under 40 years of age, increasing from 36 to 60 months. This created an increase in the active student pilot population to 119,119 active airmen at the end of 2010 compared to 72,280 the prior year.
 8. 1994 counts based on medical certificates issued 27 or fewer months ago. All other years based on medical certificates issued 25 or fewer months ago.
 9. The FAA created the Remote Pilot operator certificate in 2016. The Remote Pilot operator data is not part of the total number of pilots.

Source: FAA

6.3 Active FAA Pilot Certificates Held by Category and Age Group of Holder (as of December 31, 2016)

Age Group	Type of Pilot Certificate								
	Total Pilots	Student	Recreational	Sport Pilot	Private	Commercial	Airline Transport	Remote Pilot	CFI
Total	584,361	128,501	178	5,889	174,517	112,056	163,220	20,362	104,382
14-15	259	259	0	0	0	0	0	0	0
16-19	16,491	12,697	3	16	3,482	293	0	214	56
20-24	57,599	31,808	28	112	14,815	10,058	778	1,388	3,637
25-29	64,176	26,837	30	201	13,698	17,703	5,707	2,397	8,101
30-34	55,351	17,693	12	239	13,167	12,011	12,229	2,761	11,884
35-39	50,246	12,314	10	234	12,342	8,997	16,349	2,564	11,919
40-44	44,770	6,212	9	292	12,577	7,513	18,167	2,217	10,691
45-49	49,254	5,571	11	427	13,322	7,417	22,506	2,143	11,642
50-54	56,377	4,962	11	676	16,929	8,214	25,585	2,094	10,614
55-59	59,558	4,069	19	933	20,822	8,966	24,749	1,746	9,733
60-64	52,066	2,847	15	993	21,015	9,275	17,921	1,425	8,703
65-69	36,580	1,798	14	807	15,516	8,598	9,847	893	7,572
70-74	23,543	954	9	560	9,758	6,762	5,500	376	5,499
75-79	11,018	328	3	266	4,382	3,574	2,465	118	2,683
80 and over	7,073	152	4	133	2,692	2,675	1,417	26	1,648

Source: FAA

6.4 Average Age of Active FAA Pilots by Category (1993-2016)

Year	Average All Pilots	Type of Pilot Certificate					
		Student	Recreational	Sport Pilot	Private	Commercial	Airline Transport
1993	41.3	33.7	45.5	-	42.7	41.9	44.1
1994	41.9	34.3	46.5	-	43.2	42.4	44.4
1995	42.9	34.5	48.3	-	44.6	43.7	44.9
1996	43.2	34.6	49.3	-	45.1	44.1	45.1
1997	43.6	34.6	49.5	-	45.6	44.6	45.6
1998	43.8	34.7	49.8	-	45.9	45.0	45.4
1999	43.6	34.6	49.5	-	45.6	44.6	45.3
2000	43.7	34.1	49.8	-	45.6	44.9	45.8
2001	44.0	33.3	50.8	-	46.0	45.0	46.0
2002	44.4	33.7	51.0	-	46.2	45.5	46.6
2003	44.7	34.0	51.5	-	46.5	45.6	47.0
2004	45.1	34.2	51.3	-	47.0	45.9	47.5
2005	45.5	34.6	50.9	53.2	47.4	46.0	47.8
2006	45.6	34.4	51.5	52.9	47.7	46.1	48.1
2007	45.7	34.0	52.4	52.9	48.0	46.1	48.3
2008	45.1	33.6	50.1	53.2	46.9	44.8	48.5
2009	45.3	33.5	50.4	53.5	47.1	44.2	48.9
2010	44.2	31.4	50.8	53.8	47.6	44.2	49.4
2011	44.4	31.4	48.8	54.4	47.9	44.4	49.7
2012	44.7	31.5	47.8	54.7	48.3	44.8	49.9
2013	44.8	31.5	44.8	55.2	48.5	45.4	49.7
2014	44.8	31.5	43.1	55.8	48.5	45.5	49.8
2015	44.8	31.4	44.6	56.2	48.5	45.6	49.9
2016	44.9	31.7	44.0	56.4	48.4	46.0	50.2

Source: FAA



7.3 U.S. Airports Ranked by Number of General Aviation Operations at Tower (2016)

Rank 2016	Facility	Airport Name and State	General Aviation Operations				Total Airport Operations	Total GA Operations	GA as % of Total	Tower Operations	
			IFR GA		VFR GA						Local Civil GA
			Itinerant	Overflight	Itinerant	Overflight					
1	DVT	Phoenix Deer Valley, AZ	7,258	826	116,759	6,682	241,742	370,034	373,267	98.7%	378,061
2	APA	Centennial Airport, CO	42,325	40	103,482	6,392	153,848	332,111	306,087	90.0%	340,249
3	TMB	Kendall-Tamiami Executive Airport, FL	33,739	216	125,243	3,589	116,211	278,027	278,998	98.9%	282,066
4	LGB	Long Beach, CA	25,044	378	81,437	17,585	154,046	294,886	278,490	88.9%	313,421
5	PRC	Ernest A. Love Field, AZ	2,586	34	68,413	763	178,125	253,211	249,921	98.3%	254,342
6	SEE	Gillespie Field, CA	15,007	249	69,028	5,567	141,797	226,876	231,648	99.3%	233,257
7	CHD	Chandler Municipal Airport, AZ	4,482	135	73,378	2,282	141,586	221,473	221,863	98.5%	225,244
8	GFK	Grand Forks Int'l, ND	6,688	8	6,222	505	204,564	318,506	217,987	68.3%	319,178
9	VNY	Van Nuys, CA	37,376	1139	92,486	20,215	66,130	213,566	217,346	91.7%	237,102
10	FFZ	Falcon Field, AZ	3,407	98	44,890	7,772	152,579	263,118	208,746	76.4%	273,395
11	IWA	Phoenix-Mesa Gateway Airport, AZ	15,190	177	42,032	5,280	142,389	250,778	205,068	79.3%	258,492
12	MYF	Montgomery Field Airport, CA	24,177	105	73,252	8,087	98,680	200,668	204,301	97.5%	209,453
13	FRG	Republic Airport, NY	14,259	162	84,176	5,065	100,569	209,978	204,231	91.6%	222,887
14	VRB	Vero Beach Municipal Airport, FL	20,841	164	76,603	2,717	102,807	204,611	203,132	97.9%	207,583
15	SNA	John Wayne-Orange County, CA	33,100	676	66,875	9,857	91,184	300,354	201,692	64.4%	313,085
16	DAB	Daytona Beach, FL	21,835	359	30,210	3,226	143,608	307,333	199,238	63.8%	312,292
17	HIO	Portland-Hillsboro Airport, OR	13,668	120	64,110	3,426	115,332	197,763	196,656	97.7%	201,382
18	HWO	North Perry Airport, FL	2,994	2594	59,188	10,132	113,985	176,306	188,893	98.9%	190,955
19	SFB	Sanford-Orlando, FL	9,595	25	15,565	945	159,684	289,312	185,814	64.0%	290,385
20	CNO	Chino, CA	15,343	803	54,070	8,422	106,947	177,577	185,585	99.2%	187,100
21	RVS	Richard Lloyd Jones, OK	14,529	46	54,719	953	110,251	182,050	180,498	98.0%	184,238
22	PMP	Pompano Beach Airpark, FL	5,428	10397	46,763	20,220	92,998	145,660	175,806	94.2%	186,534
23	FXE	Fort Lauderdale Executive Airport, FL	36,651	466	75,920	13,047	34,144	160,295	160,228	91.9%	174,391
24	RHV	Reid-Hillview, CA	2,008	3865	53,646	4,796	95,541	151,701	159,856	82.1%	194,744
25	PAO	Palo Alto Airport, CA	5,611	1839	51,040	4,782	95,702	153,238	158,974	95.5%	166,400
26	FPR	Saint Lucie County Int'l Airport, FL	21,833	287	52,009	2,365	79,286	155,028	155,780	98.6%	157,988
27	SDL	Scottsdale Airport, AZ	32,070	182	51,880	7,587	58,270	158,295	149,989	89.9%	166,776
28	CRQ	McClellan-Palomar Airport, CA	38,458	152	48,687	5,425	56,363	153,016	149,085	92.4%	161,266
29	PDK	DeKalb-Peachtree Airport, GA	47,282	514	50,827	11,284	38,913	158,525	148,820	85.1%	174,824
30	FTW	Fort Worth Meacham International Airport, TX	24,953	1077	38,950	8,552	74,009	148,316	147,541	90.8%	162,536
31	FIN	Flagler County Airport, FL	4,722	0	34,831	363	105,357	146,830	145,273	98.6%	147,323
32	VGT	North Las Vegas Airport, NV	10,002	408	47,033	2,703	82,996	159,430	143,142	86.6%	165,236
33	BFI	Boeing Field, King County Airport, WA	28,112	1560	55,441	13,745	43,992	169,641	142,850	57.4%	249,075
34	CMA	Camarillo Airport, CA	13,605	5111	55,575	6,174	62,343	135,517	142,808	94.4%	151,281
35	DTO	Denton Municipal Airport, TX	9,644	10	51,870	2,282	73,279	136,656	137,085	98.6%	139,014
36	BJC	Rocky Mountain Metropolitan Airport, CO	13,841	470	51,048	3,738	67,619	141,716	136,716	93.4%	146,384
37	EVB	New Smyrna Beach Municipal, FL	7,569	137	39,731	3,060	82,808	132,000	133,305	98.5%	135,283
38	SGJ	North East Florida Regional Airport, FL	12,372	182	48,019	1,209	69,215	141,398	130,997	91.2%	143,610
39	TOA	Zamperini Field Airport, CA	7,099	171	52,990	11,935	54,366	115,188	126,561	98.9%	127,962
40	RNT	Renton Municipal Airport, WA	4,005	51	43,219	4,477	73,547	123,013	125,299	97.9%	127,998
41	HWD	Hayward Executive Airport, CA	8,199	7228	36,537	10,403	62,506	108,701	124,873	70.0%	178,337
42	OPF	Opa-Locka Executive Airport, FL	35,871	2	38,063	10,958	36,585	130,070	121,479	86.0%	141,195
43	MRI	Merrill Field Airport, AK	1,297	80	56,345	3,448	59,741	130,423	120,911	87.9%	137,613
44	TTD	Portland-Troutdale Airport, OR	1,370	12	31,288	2,190	86,047	119,110	120,907	98.9%	122,310
45	TKI	McKinney National Airport, TX	9,196	1	30,028	2,623	78,657	120,470	120,505	97.5%	123,533
46	LAL	Lakeland Linder Regional Airport, FL	15,158	1020	45,380	6,486	52,411	115,571	120,455	97.8%	123,155
47	CRG	Jacksonville Executive Airport at Craig, FL	21,549	228	32,508	1,786	63,288	130,822	119,359	83.2%	143,376
48	LVK	Livermore Municipal Airport, CA	7,718	22	45,400	3,386	62,798	118,099	119,324	98.2%	121,531
49	PTK	Oakland Country International Airport, MI	26,111	357	40,180	2,653	48,813	125,132	118,114	92.1%	128,282
50	CCR	Buchanan Field Airport, CA	7,631	33	37,661	2,499	69,601	119,609	117,425	95.9%	122,435

63% local

General aviation operations are defined by the FAA based on the traffic operations counted in the OPSNET.

Total operations include general aviation operations as well as commercial and military operations. GA does not include FAR Part 135 on-demand operations in this table.

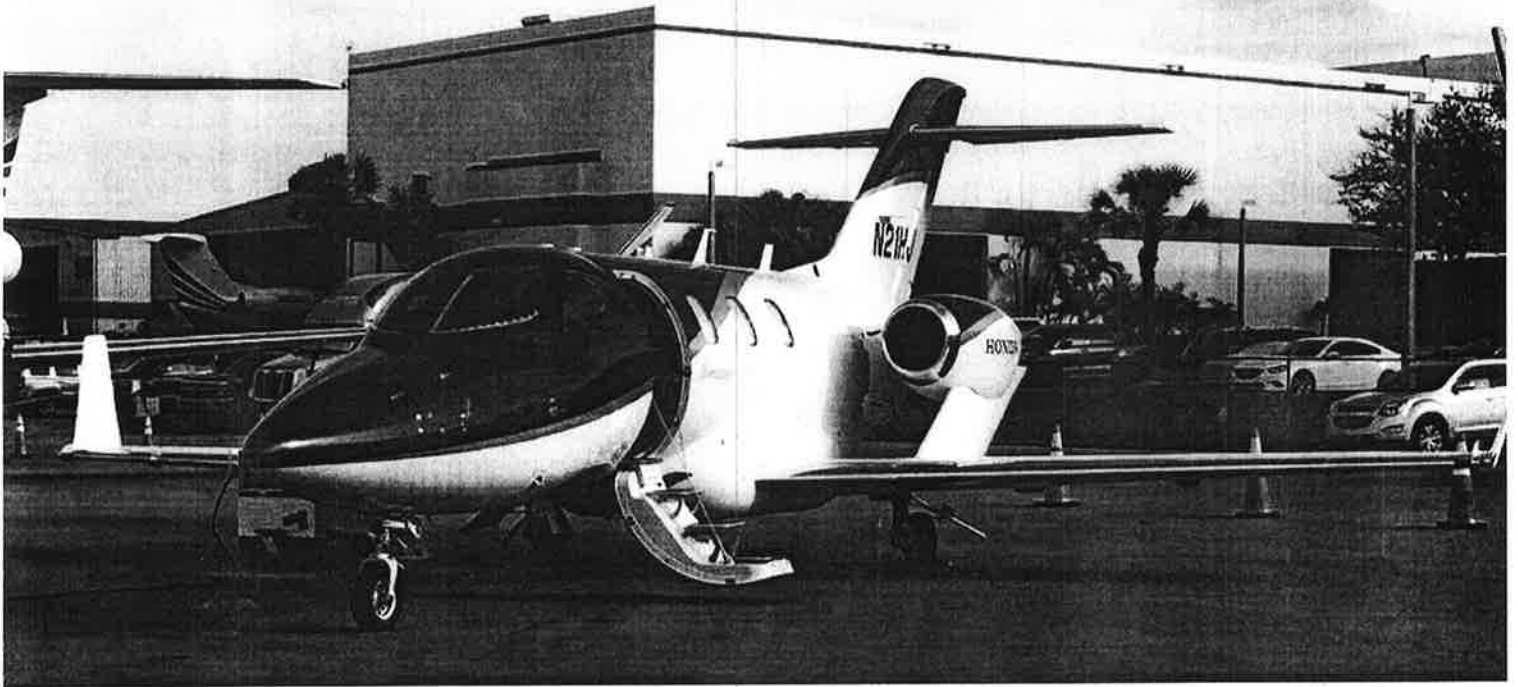
Source: FAA Operations Network (OPSNET)



FAA Forecast: Turbine Fleet To Keep GA Market Stable

by [Kerry Lynch](#)

March 21, 2018, 11:31 AM



The fleet of turbine aircraft, such as this Honda Aircraft HA-420 HondaJet, are expected to increase 2 percent a year in the U.S. through 2038, according to the FAA's latest general aviation forecast. (Photo: Chad Trautvetter/AIN)

The U.S. active general aviation fleet is anticipated to remain stable over the next 20 years, growing less than 0.5 percent in total through 2038, according to the latest FAA forecast. This stability is anticipated to come on the strength of the turbine aircraft and helicopter markets, which are expected to offset declines in the piston aircraft fleet, the agency added. The most recent forecast, released last week, is more conservative than the FAA's projection last year of more than 1.5 percent growth in total over the following 20 years.

According to the 2018 to 2038 forecast, the general aviation fleet will inch up from 213,050 in 2017 to 214,090 by 2038. Looking at the turbine fleet alone, the FAA is projecting an average growth rate of 2 percent a year, for a total of 15,255 additional aircraft over the forecast period. The number of fixed-wing aircraft, however, is expected to shrink by an annual rate of 0.8 percent, for a total loss of 22,350 aircraft over the forecast period.

The FAA cited stronger U.S. GDP and corporate profits as drivers of the turbine growth, but in turn believes "unfavorable pilot demographics, overall increasing cost of aircraft ownership, coupled with new aircraft deliveries not keeping pace with retirements of the aging fleet" will dampen the piston market.

The fleet size of light-sport aircraft, meanwhile, is forecast to grow by 3.6 percent a year, expanding by 2,850 aircraft by 2038, reaching double the number of 2016.

TABLE 4
ESTIMATED ACTIVE PILOT CERTIFICATES HELD
BY CLASS OF CERTIFICATE
as of DECEMBER 31

CLASS OF CERTIFICATE	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Rotorcraft (only) 3/--Total	15,355	15,518	15,566	15,511	15,114	15,126	15,220	15,377	15,298	14,647
Private Gyroplane	15	11	11	7	9	11	14	16	20	26
Private Helicopter	3,420	3,719	3,856	3,997	3,952	4,165	4,532	4,862	4,983	4,982
Commercial Helicopter	10,066	9,935	9,870	9,780	9,588	9,505	9,402	9,334	9,206	8,686
Commercial Helicopter, Private Glider	2	3	3	5	6	6	7	7	6	7
Commercial Helicopter, Commercial Glider	1	1	2	3	2	3	5	4	5	3
Commercial Gyroplane	3	3	2	2	3	3	4	4	5	3
Gyroplane	10	7	7	6	6	5	4	6	6	5
Airline Transport Helicopter	1,823	1,824	1,806	1,704	1,541	1,420	1,242	1,132	1,053	919
Recreational Gyroplane	2	2	1	1	1	1	1	3	3	4
Recreational Helicopter	2	1	0	0	0	0	0	0	1	1
Rotorcraft-other	11	12	8	6	6	7	9	9	10	11
Glider (only) 4,5/--Total	18,139	17,991	19,460	19,927	20,381	20,802	21,141	21,275	21,268	21,055
Private Glider	10,266	10,141	13,714	14,023	14,309	14,559	14,732	14,834	14,844	14,773
Commercial Glider	4,293	4,348	3,723	3,877	4,013	4,137	4,260	4,307	4,352	4,334
Air Transport (other)	3,580	3,502	2,023	2,027	2,059	2,106	2,149	2,134	2,072	1,948
Flight Instructor Certificates 6/	106,692	104,382	102,628	100,993	98,842	98,328	97,409	96,473	94,863	93,202
Instrument Ratings 6,7/	306,652	302,572	304,329	306,066	307,120	311,952	314,122	318,001	323,495	325,247
Remote Pilot Certificates 8/	69,166	20,362	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1/ In July 2010, the FAA issued a rule that increased the duration of validity for student pilot certificates for pilots under the age of 40 from 36 to 60 months.

This resulted in the increase in active student pilots to 119,119 from 72,280 at the end of 2009.

Starting with April 2016, there is no expiration date on the new student pilot certificates, which generates a cumulative increase in the numbers.

2/ Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate. Prior to 1995, these pilots were categorized as private, commercial, or airline transport, based on their airplane certificate. In 1995 and after, they are categorized based on their highest certificate. For example, if a pilot holds a private certificate and a commercial helicopter certificate, prior 1995, the pilot would be categorized as private; 1995 and after as commercial.

3/ See table 7 for the total number of pilots with a helicopter certificate.

4/ See table 8 for the total number of pilots with a glider certificate.

5/ Glider pilots are not required to have a medical examination. Beginning with 2002, glider pilots with another rating but no current medical are counted as "Glider (only)".

6/ Not included in total.

7/ Special ratings shown on pilot certificates, do not indicate additional certificates.

8/ Remote pilot certification started in August 2016. These numbers are not included in the pilot totals.

N/A Not available.

STATE	COUNTY	FIPS COUNTY	STUDENT PILOT	SPORT PILOT	REC PILOT	PRIVATE PILOT	COM PILOT	ATP PILOT	TOTAL US PILOT	FOREIGN PILOT	FLIGHT INSTR	AUTH INSTR	FLIGHT ENG	FOREIGN FLT EN
CALIFORNIA	MONTEREY	053	86	3	0	362	191	146	788	28	105	0	45	
	SAN BENITO	069	13	2	0	81	24	11	131	4	15	0	4	
	SAN LUIS OBISPO	079	110	7	0	524	196	192	1,029	20	142	0	56	
	SANTA CLARA	085	412	18	0	1,955	638	392	3,415	362	431	0	144	
	SANTA CRUZ	087	93	2	0	423	143	116	777	28	103	0	42	
	WP15 TOTALS:		714	32	0	3,345	1,192	857	6,140	442	796	0	291	
	WP15 GRAND TOTAL:		7,669											

AIRMEN CERTIFICATION SYSTEM
 ACTIVE PILOTS DETAIL
 WP15 - SAN JOSE

STATE	COUNTY	FIPS COUNTY	STUDENT PILOT	SPORT PILOT	REC PILOT	PRIVATE PILOT	COM PILOT	ATP PILOT	TOTAL US PILOT	FOREIGN PILOT	FLIGHT INSTR	AUTH INSTR	FLIGHT ENG	FOREIGN FLT ENG
CALIFORNIA	MONTEREY	053	90	3	0	361	178	140	772	28	106	0	42	
	SAN BENITO	069	15	2	0	77	24	11	129	4	14	0	4	
	SAN LUIS OBISPO	079	111	7	0	487	190	187	982	20	147	0	52	
	SANTA CLARA	085	386	20	1	1,881	638	389	3,315	358	437	0	144	
	SANTA CRUZ	087	87	2	0	419	136	120	764	27	102	0	42	
	WP15 TOTALS:		689	34	1	3,225	1,166	847	5,962	437	806	0	284	
	WP15 GRAND TOTAL:			7,489										

AIRMEN CERTIFICATION SYSTEM
ACTIVE PILOTS DETAIL
WESTERN-PACIFIC

STATE	COUNTY	FIPS COUNTY	STUDENT PILOT	SPORT PILOT	REC PILOT	PRIVATE PILOT	COM PILOT	ATP PILOT	TOTAL US PILOT	FOREIGN PILOT	FLIGHT INSTR	AUTH INSTR	FLIGHT ENG	FOREIGN FLT ENG
CALIFORNIA	ALAMEDA	001	378	11	0	971	424	350	2,134	279	350	0	89	0
	ALPINE	003	0	0	0	2	1	0	3	0	1	0	0	0
	AMADOR	005	18	1	0	82	31	26	158	3	20	0	7	0
	BUTTE	007	93	7	0	238	106	71	515	8	62	0	26	0
	CALAVERAS	009	20	0	0	66	28	15	129	2	18	0	11	0
	COLUSA	011	12	0	0	38	27	2	79	2	5	0	3	0
	CONTRA COSTA	013	335	8	0	854	342	382	1,921	112	261	0	150	0
	DEL NORTE	015	6	0	0	10	6	7	29	1	3	0	0	0
	EL DORADO	017	87	1	1	392	151	183	815	17	105	0	72	0
	FRESNO	019	169	4	0	461	254	233	1,121	44	189	0	49	0
	GLENN	021	11	0	0	27	25	1	64	1	3	0	0	0
	HUMBOLDT	023	66	2	0	152	45	26	291	1	29	0	8	0
	IMPERIAL	025	31	0	0	93	46	14	184	7	24	0	3	0
	INYO	027	5	0	0	37	16	4	62	0	8	0	1	0
	KERN	029	322	3	0	628	390	195	1,538	110	261	0	29	0
	KINGS	031	58	1	0	74	116	35	284	6	35	0	10	0
	LAKE	033	17	3	0	64	24	9	117	3	12	0	3	0
	LASSEN	035	19	1	0	44	11	4	79	0	9	0	0	0
	LOS ANGELES	037	2,466	34	0	4,462	2,231	1,692	10,885	1,318	1,705	4	477	2
	MADERA	039	26	1	0	86	49	36	198	1	39	0	6	0
	MARIN	041	98	9	1	375	137	145	765	58	81	0	71	0
	MARIPOSA	043	7	0	0	26	12	5	50	1	9	0	1	0
	MENDOCINO	045	46	1	0	130	48	14	239	4	22	0	4	0
	MERCED	047	144	0	0	117	82	19	362	8	37	0	5	0
	MODOC	049	7	1	0	17	6	2	33	1	3	0	1	0
	MONO	051	6	0	0	29	8	8	51	2	5	0	1	0
	MONTEREY	053	116	4	0	324	174	137	755	29	109	0	41	0
	NAPA	055	335	2	0	186	121	109	753	692	72	0	52	0
	NEVADA	057	63	5	0	232	111	98	509	11	93	0	40	0
	ORANGE	059	1,019	8	0	2,020	1,066	1,195	5,308	360	858	2	464	0
	PLACER	061	176	6	0	478	242	273	1,175	16	182	0	99	0
	PLUMAS	063	12	0	0	34	13	10	69	1	9	0	2	0
	RIVERSIDE	065	683	14	0	1,384	676	677	3,434	105	489	0	271	0
	SACRAMENTO	067	419	11	0	781	415	386	2,012	103	316	0	129	0
	SAN BENITO	069	16	2	0	74	27	12	131	4	15	0	5	0
	SAN BERNARDINO	071	594	8	0	1,094	597	343	2,636	146	407	0	117	0
	SAN DIEGO	073	1,749	32	1	2,857	1,919	1,783	8,341	560	1,186	1	735	2
	SAN FRANCISCO	075	235	2	0	472	158	119	986	142	125	0	42	0
	SAN JOAQUIN	077	114	11	0	283	123	72	603	21	69	0	16	0
	SAN LUIS OBISPO	079	166	6	0	470	201	181	1,024	21	153	0	47	0
	SAN MATEO	081	239	0	0	796	326	275	1,636	1,001	225	0	131	0
	SANTA BARBARA	083	165	0	0	499	202	189	1,055	60	139	0	56	0
	SANTA CLARA	085	571	22	1	1,801	626	392	3,413	362	466	0	138	0
	SANTA CRUZ	087	132	2	0	387	130	117	768	26	97	0	40	0
	SHASTA	089	145	5	0	259	181	76	666	22	100	0	18	0
	SIERRA	091	2	0	0	6	1	0	9	0	1	0	0	0
	SISKIYOU	093	20	0	0	85	43	7	155	2	24	0	3	0
	SOLANO	095	138	0	0	312	218	285	953	30	137	0	158	0
	SONOMA	097	197	13	1	624	282	268	1,385	40	211	0	114	0
	STANISLAUS	099	84	1	0	223	127	65	500	11	69	0	12	0
	SUTTER	101	27	2	0	98	50	31	208	2	24	0	9	0
	TEHAMA	103	28	1	0	73	32	19	153	1	18	0	4	0
	TRINITY	105	8	1	0	17	11	2	39	0	6	0	1	0
	TULARE	107	98	0	0	235	107	44	484	10	55	0	6	0
	TUOLUMNE	109	35	1	0	125	56	40	257	3	42	0	14	0

STATE	COUNTY	FIPS COUNTY	STUDENT PILOT	SPORT PILOT	REC PILOT	PRIVATE PILOT	COM PILOT	ATP PILOT	TOTAL US PILOT	FOREIGN PILOT	FLIGHT INSTR	AUTH INSTR	FLIGHT ENG	FOREIGN FLT ENG
CALIFORNIA	ALAMEDA	001	361	11	0	903	429	328	2,032	279	331	0	80	0
	ALPINE	003	0	0	0	2	1	0	3	0	1	0	0	0
	AMADOR	005	18	1	0	77	30	23	149	3	21	0	6	0
	BUTTE	007	80	7	0	232	107	71	497	8	64	0	24	0
	CALAVERAS	009	16	0	0	63	28	15	122	2	18	0	12	0
	COLUSA	011	13	0	0	39	28	2	82	1	5	0	3	0
	CONTRA COSTA	013	313	9	0	797	321	393	1,833	113	259	0	155	1
	DEL NORTE	015	2	0	0	8	7	7	24	1	3	0	0	0
	EL DORADO	017	81	2	1	359	153	181	777	18	106	0	69	0
	FRESNO	019	161	4	0	449	249	233	1,096	48	185	0	46	0
	GLENN	021	12	0	0	29	23	2	66	1	3	0	0	0
	HUMBOLDT	023	68	3	0	148	45	28	292	1	31	0	8	0
	IMPERIAL	025	31	0	0	94	44	14	183	7	24	0	3	0
	INYO	027	6	0	0	38	18	4	66	0	7	0	1	0
	KERN	029	306	4	0	603	386	188	1,487	111	258	0	30	0
	KINGS	031	75	1	0	73	108	34	291	6	35	0	9	0
	LAKE	033	19	3	0	57	24	9	112	3	12	0	2	0
	LASSEN	035	15	1	0	34	13	4	67	0	8	0	0	0
	LOS ANGELES	037	2,420	37	0	4,325	2,143	1,700	10,625	1,312	1,698	4	470	2
	MADERA	039	12	1	0	88	42	33	176	1	38	0	7	0
	MARIN	041	89	8	1	375	135	145	753	54	83	0	70	0
	MARIPOSA	043	5	0	0	26	11	5	47	1	8	0	1	0
	MENDOCINO	045	50	3	0	124	46	11	234	4	20	0	4	0
	MERCED	047	85	0	0	106	72	20	283	8	37	0	5	0
	MODOC	049	5	1	0	13	6	2	27	1	3	0	1	0
	MONO	051	7	0	0	26	7	10	50	2	6	0	2	0
	MONTEREY	053	97	4	0	305	165	137	708	29	112	0	40	0
	NAPA	055	284	2	0	202	123	104	715	678	74	0	46	0
	NEVADA	057	58	5	0	224	111	99	497	12	94	0	40	0
	ORANGE	059	964	9	0	1,954	1,024	1,200	5,151	349	843	2	449	0
	PLACER	061	183	7	0	466	241	278	1,175	15	183	0	100	0
	PLUMAS	063	8	0	0	29	11	10	58	1	10	0	2	0
	RIVERSIDE	065	628	17	0	1,290	673	673	3,281	111	487	0	264	0
	SACRAMENTO	067	376	12	0	737	397	404	1,926	102	312	0	124	0
	SAN BENITO	069	15	1	0	68	28	11	123	4	16	0	4	0
	SAN BERNARDINO	071	580	9	0	1,088	606	336	2,619	142	403	0	120	0
	SAN DIEGO	073	1,640	34	1	2,770	1,962	1,810	8,217	572	1,219	1	730	2
	SAN FRANCISCO	075	220	3	0	455	152	131	961	142	122	0	42	0
	SAN JOAQUIN	077	108	12	0	271	120	75	586	21	71	0	15	0
	SAN LUIS OBISPO	079	130	6	0	433	198	188	955	22	158	0	50	0
	SAN MATEO	081	227	0	0	767	305	275	1,574	995	226	0	128	3
	SANTA BARBARA	083	172	0	0	474	202	186	1,034	59	139	0	54	0
	SANTA CLARA	085	538	21	1	1,741	613	372	3,286	356	455	0	129	0
	SANTA CRUZ	087	113	3	0	381	119	106	722	26	100	0	33	0
	SHASTA	089	141	5	0	282	226	81	735	22	99	0	20	0
	SIERRA	091	1	0	0	7	0	0	8	0	0	0	0	0
	SISKIYOU	093	20	1	0	83	49	7	160	2	27	0	3	0
	SOLANO	095	140	3	0	293	207	287	930	29	143	0	154	0
	SONOMA	097	186	14	1	598	283	262	1,344	39	213	0	110	0
	STANISLAUS	099	83	2	0	203	128	62	478	12	70	0	9	0
	SUTTER	101	36	2	0	90	45	29	202	2	24	0	8	0
	TEHAMA	103	27	1	0	71	29	21	149	1	21	0	7	0
	TRINITY	105	6	1	0	16	10	1	34	0	6	0	0	0
	TULARE	107	106	0	0	231	114	41	492	11	56	0	6	0
	TUOLUMNE	109	42	1	0	131	58	42	274	3	45	0	15	0

AIRMEN CERTIFICATION SYSTEM
 ACTIVE PILOTS DETAIL
 WESTERN-PACIFIC

STATE	COUNTY	FIPS COUNTY	STUDENT PILOT	SPORT PILOT	REC PILOT	PRIVATE PILOT	COM PILOT	ATP PILOT	TOTAL US PILOT	FOREIGN PILOT	FLIGHT INSTR	AUTH INSTR	FLIGHT ENG	FOREIGN FLT ENG
CALIFORNIA	ALAMEDA	001	330	14	1	863	400	357	1,965	275	341	0	78	0
	ALPINE	003	0	0	0	2	1	0	3	0	1	0	0	0
	AMADOR	005	10	1	0	77	26	19	133	3	16	0	5	0
	BUTTE	007	84	7	0	218	110	74	493	8	70	0	24	0
	CALAVERAS	009	17	1	0	56	24	18	116	2	20	0	12	0
	COLUSA	011	12	0	0	42	29	2	85	1	5	0	3	0
	CONTRA COSTA	013	287	11	0	762	287	405	1,752	107	254	0	151	1
	DEL NORTE	015	4	0	0	9	5	7	25	1	1	0	0	0
	EL DORADO	017	81	3	0	355	135	171	745	19	104	0	64	0
	FRESNO	019	147	5	0	433	237	237	1,059	47	198	0	44	0
	GLENN	021	13	0	0	32	20	3	68	1	4	0	1	0
	HUMBOLDT	023	56	3	0	137	41	27	264	1	31	0	7	0
	IMPERIAL	025	32	0	0	95	45	16	188	7	26	0	3	0
	INYO	027	7	1	0	33	16	4	61	0	5	0	1	0
	KERN	029	261	3	0	592	365	188	1,409	106	259	0	26	0
	KINGS	031	79	1	0	67	94	36	277	6	31	0	7	0
	LAKE	033	17	4	0	56	25	9	111	2	12	0	3	0
	LASSEN	035	12	1	0	28	10	3	54	0	7	0	0	0
	LOS ANGELES	037	2,435	45	0	4,132	2,125	1,746	10,483	1,303	1,707	4	466	2
	MADERA	039	15	1	0	89	49	35	189	2	41	0	8	0
	MARIN	041	80	9	1	351	136	156	733	55	91	0	71	0
	MARIPOSA	043	8	0	0	30	9	5	52	1	7	0	1	0
	MENDOCINO	045	44	3	0	119	41	12	219	4	20	0	4	0
	MERCED	047	119	0	0	101	64	16	300	8	29	0	5	0
	MODOC	049	3	1	0	15	5	2	26	1	3	0	1	0
	MONO	051	8	0	0	29	5	8	50	2	6	0	2	0
	MONTEREY	053	114	3	0	294	147	135	693	31	110	0	37	0
	NAPA	055	217	2	0	159	118	104	600	675	71	0	45	0
	NEVADA	057	55	5	0	220	104	97	481	11	90	0	36	0
	ORANGE	059	993	10	0	1,903	937	1,239	5,082	335	854	1	452	0
	PLACER	061	176	9	0	440	229	287	1,141	15	193	0	102	0
	PLUMAS	063	7	0	0	28	9	9	53	1	9	0	2	0
	RIVERSIDE	065	589	22	0	1,206	606	668	3,091	113	470	0	249	0
	SACRAMENTO	067	332	14	0	678	352	383	1,759	102	303	0	105	0
	SAN BENITO	069	19	1	0	68	27	11	126	4	13	0	4	0
	SAN BERNARDINO	071	587	11	0	1,041	583	346	2,568	145	401	0	115	0
	SAN DIEGO	073	1,681	35	1	2,688	1,910	1,819	8,134	564	1,228	1	697	2
	SAN FRANCISCO	075	224	3	0	446	152	130	955	142	116	0	36	0
	SAN JOAQUIN	077	110	12	0	269	116	78	585	23	72	0	17	0
	SAN LUIS OBISPO	079	148	6	0	433	192	189	968	21	161	0	49	0
	SAN MATEO	081	234	0	0	757	287	281	1,559	977	219	0	127	3
	SANTA BARBARA	083	163	0	0	469	205	192	1,029	58	148	0	56	0
	SANTA CLARA	085	562	23	1	1,627	595	368	3,176	351	446	0	121	0
	SANTA CRUZ	087	95	5	0	359	113	117	689	26	101	0	37	0
	SHASTA	089	190	5	0	245	357	77	874	20	103	0	16	0
	SIERRA	091	0	0	0	4	0	0	4	0	0	0	0	0
	SISKIYOU	093	17	1	0	76	46	9	149	2	26	0	3	0
	SOLANO	095	155	5	0	297	183	288	928	30	134	0	148	0
	SONOMA	097	194	17	1	572	271	256	1,311	37	203	0	106	0
	STANISLAUS	099	91	2	0	192	114	68	467	10	66	0	13	0
	SUTTER	101	35	2	0	89	44	31	201	3	26	0	8	0
	TEHAMA	103	23	1	0	62	29	20	135	0	21	0	6	0
	TRINITY	105	7	1	0	14	11	1	34	0	7	0	0	0
	TULARE	107	105	1	0	214	114	45	479	11	58	0	5	0
	TUOLUMNE	109	35	1	0	131	52	40	259	2	42	0	14	0

AIRMEN CERTIFICATION SYSTEM
 ACTIVE PILOTS DETAIL
 WESTERN-PACIFIC

STATE	COUNTY	FIPS COUNTY	STUDENT PILOT	SPORT PILOT	REC PILOT	PRIVATE PILOT	CCM PILOT	ATP PILOT	TOTAL US PILOT	FOREIGN PILOT	FLIGHT INSTR	AUTH INSTR	FLIGHT ENG	FOREIGN FLT ENG
CALIFORNIA	ALAMEDA	001	399	13	1	811	383	356	1,963	272	334	0	76	0
	ALPINE	003	1	0	0	2	0	2	5	0	1	0	1	0
	AMADOR	005	10	1	0	71	26	14	122	3	16	0	4	0
	BUTTE	007	81	8	0	213	96	74	472	8	67	0	22	0
	CALAVERAS	009	13	1	0	54	24	15	107	1	23	0	9	0
	COLUSA	011	11	0	0	44	27	2	84	1	4	0	2	0
	CONTRA COSTA	013	288	11	0	712	258	402	1,671	105	252	0	142	1
	DEL NORTE	015	3	0	0	11	5	8	27	2	3	0	0	0
	EL DORADO	017	96	4	0	337	130	165	732	17	113	0	60	0
	FRESNO	019	149	6	0	427	218	231	1,031	46	188	0	41	0
	GLENN	021	17	0	0	31	20	3	71	1	4	0	1	0
	HUMBOLDT	023	54	4	0	131	34	24	247	1	33	0	5	0
	IMPERIAL	025	33	0	0	88	40	17	178	6	25	0	3	0
	INYO	027	3	1	0	32	13	4	53	0	4	0	1	0
	KERN	029	260	3	0	577	341	180	1,361	105	242	0	25	0
	KINGS	031	73	1	0	61	96	40	271	6	35	0	7	0
	LAKE	033	15	4	0	53	26	9	107	2	12	0	3	0
	LASSEN	035	8	1	0	31	10	3	53	0	6	0	0	0
	LOS ANGELES	037	2,470	49	0	3,966	1,984	1,792	10,261	1,287	1,708	4	457	2
	MADERA	039	16	1	0	82	42	34	175	2	36	0	8	0
	MARIN	041	75	9	1	344	122	155	706	55	87	0	68	0
	MARIPOSA	043	7	0	0	28	11	4	50	1	3	0	1	0
	MENDOCINO	045	37	3	0	118	49	16	223	4	24	0	7	0
	MERCED	047	103	0	0	89	61	16	269	8	30	0	3	0
	MODOC	049	2	0	0	15	4	3	24	1	3	0	2	0
	MONO	051	10	0	0	30	5	8	53	2	6	0	2	0
	MONTEREY	053	123	3	0	270	123	124	643	29	103	0	32	0
	NAPA	055	170	2	0	149	106	101	528	669	64	0	42	0
	NEVADA	057	54	5	0	202	105	106	472	9	96	0	33	0
	ORANGE	059	985	11	0	1,772	880	1,253	4,901	326	858	1	436	0
	PLACER	061	179	10	0	418	220	305	1,132	14	208	0	104	0
	PLUMAS	063	6	0	0	26	9	8	49	1	10	0	2	0
	RIVERSIDE	065	620	27	0	1,164	563	690	3,064	112	477	0	240	0
	SACRAMENTO	067	343	17	0	628	323	406	1,717	95	307	0	107	0
	SAN BENITO	069	22	1	0	53	24	12	112	4	12	0	3	0
	SAN BERNARDINO	071	603	12	0	970	546	349	2,480	144	412	0	102	0
	SAN DIEGO	073	1,703	34	1	2,613	1,817	1,890	8,058	570	1,270	1	665	2
	SAN FRANCISCO	075	246	5	0	465	143	132	991	143	119	0	34	0
	SAN JOAQUIN	077	109	12	0	258	111	74	564	31	73	0	15	0
	SAN LUIS OBISPO	079	159	6	0	417	165	204	951	20	161	0	51	0
	SAN MATEO	081	224	0	0	720	273	280	1,497	963	211	0	126	3
	SANTA BARBARA	083	174	0	0	457	200	184	1,015	53	148	0	46	0
	SANTA CLARA	085	571	30	0	1,548	564	379	3,092	345	438	0	120	0
	SANTA CRUZ	087	97	7	0	341	119	119	683	27	100	0	34	0
	SHASTA	089	236	5	0	259	402	82	984	20	104	0	15	0
	SIERRA	091	0	0	0	5	0	0	5	0	0	0	0	0
	SISKIYOU	093	14	1	0	74	37	8	134	1	21	0	3	0
	SOLANO	095	160	6	0	279	175	295	915	29	133	0	136	0
	SONOMA	097	207	16	1	541	266	258	1,289	36	207	0	98	0
	STANISLAUS	099	88	2	0	188	98	65	441	11	59	0	12	0
	SUTTER	101	33	2	0	82	38	33	188	2	25	0	9	0
	TEHAMA	103	22	1	0	55	29	21	128	1	20	0	6	0
	TRINITY	105	7	1	0	13	11	2	34	0	7	0	0	0
	TULARE	107	108	1	0	208	105	51	473	9	53	0	6	0
	TUOLUMNE	109	34	1	0	112	53	38	238	2	38	0	13	0

AIRMEN CERTIFICATION SYSTEM
 ACTIVE PILOTS DETAIL
 WESTERN-PACIFIC

STATE	COUNTY	FIPS COUNTY	STUDENT PILOT	SPORT PILOT	REC PILOT	PRIVATE PILOT	COM PILOT	ATP PILOT	TOTAL US PILOT	FOREIGN PILOT	FLIGHT INSTR	AUTH INSTR	FLIGHT ENG	FOREIGN FLT ENG
CALIFORNIA	ALAMEDA	001	409	15	0	808	360	364	1,956	268	336	0	72	0
	ALPINE	003	0	0	0	2	0	1	3	0	1	0	0	0
	AMADOR	005	15	2	0	61	27	14	119	3	18	0	4	0
	BUTTE	007	77	10	0	203	97	72	459	9	67	0	21	0
	CALAVERAS	009	18	1	0	50	25	14	108	1	24	0	7	0
	COLUSA	011	14	0	0	46	29	2	91	1	5	0	2	0
	CONTRA COSTA	013	278	12	0	685	238	408	1,621	111	255	0	137	1
	DEL NORTE	015	3	0	0	12	5	7	27	1	5	0	0	0
	EL DORADO	017	92	9	0	329	122	167	719	15	108	0	59	0
	FRESNO	019	155	6	0	387	196	244	988	48	193	0	38	0
	GLENN	021	11	0	0	29	21	3	64	1	3	0	1	0
	HUMBOLDT	023	60	4	0	121	34	24	243	1	36	0	4	0
	IMPERIAL	025	28	0	0	83	31	16	158	7	20	0	3	0
	INYO	027	4	1	0	30	13	5	53	0	6	0	1	0
	KERN	029	256	3	0	545	315	180	1,299	100	230	0	20	0
	KINGS	031	62	1	0	60	79	46	248	9	34	0	6	0
	LAKE	033	16	3	0	39	23	10	91	1	12	0	3	0
	LASSEN	035	6	1	0	27	12	5	51	0	9	0	0	0
	LOS ANGELES	037	2,420	53	0	3,967	1,892	1,822	10,154	1,264	1,741	3	441	2
	MADERA	039	21	1	0	78	38	31	169	2	35	0	6	0
	MARIN	041	77	10	2	321	115	152	677	50	84	0	65	0
	MARIPOSA	043	7	0	0	26	12	3	48	1	4	0	1	0
	MENDOCINO	045	37	6	0	119	44	14	220	4	22	0	4	0
	MERCED	047	169	0	0	73	61	19	322	9	37	0	4	0
	MODOC	049	2	0	0	12	2	2	18	1	2	0	1	0
	MONO	051	5	0	0	28	3	9	45	2	5	0	2	0
	MONTEREY	053	130	3	0	255	130	116	634	28	106	0	27	0
	NAPA	055	83	3	0	141	98	104	429	661	65	0	41	0
	NEVADA	057	53	6	0	189	109	107	464	9	94	0	30	0
	ORANGE	059	1,054	15	0	1,722	847	1,266	4,904	322	859	1	433	0
	PLACER	061	186	12	0	400	193	322	1,113	15	208	0	101	0
	PLUMAS	063	5	0	0	21	9	8	43	1	8	0	2	0
	RIVERSIDE	065	640	28	0	1,145	564	685	3,062	104	486	0	238	0
	SACRAMENTO	067	370	14	0	618	306	431	1,739	88	323	0	105	0
	SAN BENITO	069	16	1	0	55	23	13	108	3	14	0	3	0
	SAN BERNARDINO	071	661	13	0	959	530	354	2,517	142	426	0	107	0
	SAN DIEGO	073	1,838	33	0	2,512	1,698	1,906	7,987	565	1,313	1	640	3
	SAN FRANCISCO	075	264	6	0	471	143	131	1,015	150	120	0	35	0
	SAN JOAQUIN	077	120	14	0	240	107	82	563	30	72	0	15	0
	SAN LUIS OBISPO	079	132	6	0	422	179	212	951	21	168	0	49	0
	SAN MATEO	081	240	1	0	729	270	284	1,524	957	215	0	123	3
	SANTA BARBARA	083	181	1	0	452	176	187	997	55	137	0	45	0
	SANTA CLARA	085	590	32	0	1,538	528	369	3,057	343	440	0	110	0
	SANTA CRUZ	087	97	7	0	320	126	118	668	27	103	0	37	0
	SHASTA	089	155	5	0	273	477	77	987	23	104	0	14	0
	SIERRA	091	1	0	0	4	0	0	5	0	0	0	0	0
	SISKIYOU	093	13	1	0	61	41	10	126	1	22	0	3	0
	SOLANO	095	177	5	0	257	149	310	898	25	134	0	124	0
	SONOMA	097	202	17	1	541	236	262	1,259	33	200	0	93	0
	STANISLAUS	099	94	2	0	176	96	62	430	11	63	0	9	0
	SUTTER	101	33	2	0	75	40	33	183	2	26	0	9	0
	TEHAMA	103	20	1	0	57	31	20	129	1	21	0	6	0
	TRINITY	105	6	1	0	13	7	2	29	0	5	0	0	0
	TULARE	107	92	1	0	208	97	49	447	7	55	0	6	0
	TUOLUMNE	109	37	1	0	112	52	38	240	2	38	0	12	0

AIRMEN CERTIFICATION SYSTEM
 ACTIVE PILOTS DETAIL
 WESTERN-PACIFIC

STATE	COUNTY	FIPS COUNTY	STUDENT PILOT	SPORT PILOT	REC PILOT	PRIVATE PILOT	COM PILOT	ATP PILOT	TOTAL US PILOT	FOREIGN PILOT	FLIGHT INSTR	AUTH INSTR	FLIGHT ENG	FOREIGN FLT ENG
CALIFORNIA	ALAMEDA	001	393	14	0	818	362	367	1,954	263	331	0	67	0
	ALPINE	003	0	0	0	3	0	2	5	0	1	0	0	0
	AMADOR	005	14	2	0	59	23	15	113	3	18	0	4	0
	BUTTE	007	81	9	0	199	99	71	459	9	69	0	22	0
	CALAVERAS	009	26	1	0	40	21	15	103	1	22	0	5	0
	COLUSA	011	8	0	0	52	26	3	89	1	6	0	2	0
	CONTRA COSTA	013	308	14	0	682	241	422	1,667	117	260	0	141	1
	DEL NORTE	015	6	1	0	12	4	6	29	0	5	0	0	0
	EL DORADO	017	88	9	0	322	118	179	716	15	111	0	57	0
	FRESNO	019	167	6	0	359	194	236	962	49	192	0	36	0
	GLENN	021	11	0	0	26	20	2	59	1	4	0	1	0
	HUMBOLDT	023	60	4	0	112	28	25	229	1	32	0	4	0
	IMPERIAL	025	28	0	0	75	36	14	153	12	20	0	3	0
	INYO	027	5	1	0	30	10	5	51	0	4	0	1	0
	KERN	029	265	2	0	519	302	169	1,257	101	224	0	18	0
	KINGS	031	53	1	0	63	79	38	234	9	34	0	5	0
	LAKE	033	12	3	0	42	19	9	85	1	11	0	3	0
	LASSEN	035	7	2	0	31	10	4	54	0	8	0	0	0
	LOS ANGELES	037	2,519	72	0	3,852	1,829	1,885	10,157	1,234	1,751	3	433	2
	MADERA	039	18	1	0	69	41	30	159	2	34	0	8	0
	MARIN	041	79	8	2	307	108	150	654	49	81	0	60	0
	MARIPOSA	043	7	0	0	24	11	5	47	1	5	0	1	0
	MENDOCINO	045	46	6	0	117	45	16	230	4	23	0	4	0
	MERCED	047	151	0	0	77	60	17	305	8	34	0	1	0
	MODOC	049	3	0	0	16	3	2	24	1	2	0	1	0
	MONO	051	4	0	0	29	3	7	43	2	3	0	1	0
	MONTEREY	053	118	4	0	255	123	118	618	27	104	0	27	0
	NAPA	055	62	3	0	136	92	100	393	652	61	0	37	0
	NEVADA	057	57	6	0	196	94	102	455	8	94	0	28	0
	ORANGE	059	1,094	19	0	1,701	834	1,295	4,943	326	887	1	424	0
	PLACER	061	214	13	0	405	187	336	1,155	16	220	0	97	0
	PLUMAS	063	4	2	0	21	8	6	41	1	8	0	1	0
	RIVERSIDE	065	629	27	0	1,100	578	725	3,059	109	507	0	236	0
	SACRAMENTO	067	391	14	0	592	308	422	1,727	86	320	0	99	0
	SAN BENITO	069	18	1	0	56	20	15	110	3	14	0	3	0
	SAN BERNARDINO	071	650	13	0	908	540	351	2,462	161	429	0	95	0
	SAN DIEGO	073	1,842	36	0	2,489	1,618	1,945	7,930	585	1,329	1	611	3
	SAN FRANCISCO	075	274	7	0	450	154	137	1,022	152	120	0	35	0
	SAN JOAQUIN	077	155	12	0	231	114	79	591	32	70	0	12	0
	SAN LUIS OBISPO	079	131	7	0	444	169	204	955	20	166	0	52	0
	SAN MATEO	081	257	5	0	714	250	300	1,526	945	232	0	118	3
	SANTA BARBARA	083	180	3	0	448	173	185	989	55	140	0	41	0
	SANTA CLARA	085	627	35	0	1,513	508	370	3,053	337	439	0	105	0
	SANTA CRUZ	087	97	7	0	310	130	132	676	28	110	0	38	0
	SHASTA	089	150	5	0	219	486	82	942	21	101	0	14	0
	SIERRA	091	2	0	0	3	0	0	5	0	0	0	0	0
	SISKIYOU	093	20	1	0	62	38	10	131	2	20	0	3	0
	SOLANO	095	177	6	0	257	147	307	894	26	137	0	116	0
	SONOMA	097	182	19	1	559	225	262	1,248	34	202	0	91	0
	STANISLAUS	099	105	2	0	170	88	67	432	11	64	0	10	0
	SUTTER	101	34	2	0	75	37	29	177	2	24	0	9	0
	TEHAMA	103	20	1	0	59	28	18	126	1	23	0	6	0
	TRINITY	105	6	1	0	13	6	3	29	0	4	0	0	0
	TULARE	107	83	1	0	197	82	46	409	8	52	0	6	0
	TUOLUMNE	109	35	1	0	111	44	39	230	2	40	0	12	0

AIRMEN CERTIFICATION SYSTEM
 ACTIVE PILOTS DETAIL
 WESTERN-PACIFIC

STATE	COUNTY	FIPS COUNTY	STUDENT PILOT	SPORT PILOT	REC PILOT	PRIVATE PILOT	COM PILOT	ATP PILOT	TOTAL US PILOT	FOR BASED PILOT	FLIGHT INSTR	AUTH INSTR	REMOTE PILOT	FLIGHT ENG	FOR BASED FLT ENG
CALIFORNIA	ALAMEDA	001	420	15	0	704	333	365	1,837	36	336	0	81	56	0
	ALPINE	003	0	0	0	1	0	2	3	0	1	0	1	0	0
	AMADOR	005	13	2	0	52	20	11	98	2	15	0	1	3	0
	BUTTE	007	86	9	0	175	87	73	430	2	64	0	8	19	0
	CALAVERAS	009	26	1	0	42	21	17	107	0	23	0	3	4	0
	COLUSA	011	12	0	0	50	26	4	92	0	6	0	0	2	0
	CONTRA COSTA	013	337	16	0	613	253	430	1,649	25	268	0	50	121	0
	DEL NORTE	015	3	1	0	13	4	7	28	0	6	0	1	0	0
	EL DORADO	017	79	14	0	291	126	176	686	0	112	0	25	46	0
	FRESNO	019	176	6	0	339	197	241	959	10	181	0	46	26	0
	GLENN	021	13	0	0	21	21	2	57	0	4	0	0	1	0
	HUMBOLDT	023	62	4	0	94	31	29	220	1	35	0	10	3	0
	IMPERIAL	025	35	0	0	69	37	13	154	6	17	0	2	2	0
	INYO	027	4	1	0	26	11	8	50	0	8	0	5	1	0
	KERN	029	270	2	0	474	279	194	1,219	36	229	0	40	14	0
	KINGS	031	48	1	0	58	71	44	222	3	32	0	2	3	0
	LAKE	033	17	3	0	34	18	10	82	0	10	0	4	2	0
	LASSEN	035	9	2	0	28	11	3	53	0	7	0	2	0	0
	LOS ANGELES	037	2,704	93	1	3,543	1,768	1,973	10,082	251	1,778	1	516	358	1
	MADERA	039	19	1	0	64	42	27	153	2	37	0	4	7	0
	MARIN	041	91	10	1	271	93	156	622	12	82	0	35	45	0
	MARIPOSA	043	6	0	0	20	8	5	39	0	5	0	1	2	0
	MENDOCINO	045	41	6	1	108	37	20	213	0	21	0	3	3	0
	MERCED	047	169	0	0	71	71	18	329	3	37	0	16	1	0
	MODOC	049	2	0	0	15	3	2	22	0	2	0	0	0	0
	MONO	051	4	0	0	27	3	6	40	0	1	0	3	1	0
	MONTEREY	053	124	4	0	246	120	133	627	4	105	0	27	28	0
	NAPA	055	65	3	0	108	90	97	363	55	64	0	19	28	0
	NEVADA	057	67	6	0	191	84	107	455	3	90	0	13	24	0
	ORANGE	059	1,210	22	0	1,595	803	1,341	4,971	76	892	1	169	356	0
	PLACER	061	225	16	0	401	180	335	1,157	6	227	0	48	83	0
	PLUMAS	063	4	1	0	16	11	8	40	0	8	0	1	2	0
	RIVERSIDE	065	688	27	0	1,033	602	741	3,091	28	509	0	102	193	0
	SACRAMENTO	067	405	17	0	576	299	431	1,728	13	325	0	80	81	0
	SAN BENITO	069	21	1	0	51	16	16	105	0	13	0	3	3	0
	SAN BERNARDINO	071	702	13	0	844	523	367	2,449	80	415	0	75	81	0
	SAN DIEGO	073	1,903	38	0	2,276	1,546	2,026	7,789	231	1,340	1	258	490	1
	SAN FRANCISCO	075	293	8	0	422	150	139	1,012	35	119	0	64	31	0
	SAN JOAQUIN	077	173	13	0	254	117	81	638	21	78	0	18	9	0
	SAN LUIS OBISPO	079	144	7	0	421	168	204	944	7	162	0	46	43	0
	SAN MATEO	081	265	4	0	657	238	291	1,455	29	214	0	81	97	1
	SANTA BARBARA	083	220	4	0	412	156	186	978	8	141	0	25	36	0
	SANTA CLARA	085	691	39	0	1,382	472	368	2,952	77	423	0	169	83	0
	SANTA CRUZ	087	110	8	1	294	110	134	657	4	106	0	38	22	0
	SHASTA	089	218	5	0	203	381	79	886	17	99	0	9	10	0
	SIERRA	091	3	0	0	1	0	0	4	0	0	0	0	0	0
	SISKIYOU	093	20	1	0	56	38	11	126	1	20	0	1	2	0
	SOLANO	095	186	7	0	234	131	338	896	6	150	0	26	107	0
	SONOMA	097	192	19	2	471	208	277	1,169	6	198	0	40	75	0
	STANISLAUS	099	99	2	0	163	88	70	422	2	64	0	13	7	0
	SUTTER	101	31	2	0	66	37	38	174	0	27	0	4	7	0
	TEHAMA	103	20	1	0	52	28	19	120	0	27	0	7	5	0
	TRINITY	105	6	1	0	12	5	3	27	0	5	0	1	0	0
	TULARE	107	78	0	0	178	82	50	388	2	48	0	12	7	0

AIRMEN CERTIFICATION SYSTEM
 ACTIVE PILOTS DETAIL
 WESTERN-PACIFIC

STATE	COUNTY	FIPS COUNTY	STUDENT PILOT	SPORT PILOT	REC PILOT	PRIVATE PILOT	COM PILOT	ATP PILOT	TOTAL US PILOT	FOR BASED PILOT	FLIGHT INSTR	AUTH INSTR	REMOTE PILOT	FLIGHT ENG	FOR BASED FLT ENG
CALIFORNIA	ALAMEDA	001	496	16	0	719	321	352	1,904	41	328	0	284	56	0
	ALPINE	003	0	0	0	1	0	2	3	0	1	0	1	0	0
	AMADOR	005	17	2	0	46	21	15	101	1	17	0	6	4	0
	BUTTE	007	112	9	0	174	93	67	455	2	62	0	44	17	0
	CALAVERAS	009	26	1	0	43	18	20	108	0	23	0	18	3	0
	COLUSA	011	14	0	0	50	28	4	96	0	6	0	3	2	0
	CONTRA COSTA	013	378	15	0	607	242	435	1,677	24	280	0	203	119	0
	DEL NORTE	015	3	0	0	12	3	8	26	0	5	0	5	0	0
	EL DORADO	017	100	15	1	282	115	186	699	0	115	0	92	47	0
	FRESNO	019	193	6	0	309	195	235	938	11	172	0	125	23	0
	GLENN	021	13	0	0	21	22	3	59	0	4	0	3	1	0
	HUMBOLDT	023	76	3	0	94	31	28	232	1	34	0	44	5	0
	IMPERIAL	025	36	0	0	76	34	13	159	6	15	0	12	2	0
	INYO	027	5	1	0	26	12	7	51	0	9	0	9	1	0
	KERN	029	324	3	0	451	284	200	1,262	35	246	0	134	11	0
	KINGS	031	54	1	0	55	55	47	212	3	29	0	7	2	0
	LAKE	033	22	3	0	26	20	10	81	0	9	0	8	2	0
	LASSEN	035	7	2	0	31	9	3	52	0	5	0	4	0	0
	LOS ANGELES	037	3,149	104	1	3,483	1,737	2,015	10,489	285	1,763	2	1,619	345	1
	MADERA	039	27	1	0	63	39	29	159	2	37	0	26	7	0
	MARIN	041	97	10	1	279	88	167	642	15	83	0	95	49	0
	MARIPOSA	043	7	0	0	18	9	6	40	0	5	0	3	2	0
	MENDOCINO	045	40	6	1	97	38	21	203	0	24	0	20	2	0
	MERCED	047	148	0	0	79	61	17	305	3	27	0	31	2	0
	MODOC	049	2	0	0	15	2	1	20	0	1	0	1	0	0
	MONO	051	6	0	0	23	4	5	38	0	0	0	7	1	0
	MONTEREY	053	139	4	0	222	126	131	622	4	103	0	69	26	0
	NAPA	055	80	4	0	100	87	93	364	56	60	0	43	23	0
	NEVADA	057	82	5	0	194	92	103	476	3	95	0	47	23	0
	ORANGE	059	1,418	23	0	1,559	820	1,378	5,198	81	916	1	636	347	0
	PLACER	061	284	16	0	397	174	349	1,220	6	223	0	141	78	0
	PLUMAS	063	7	1	0	13	9	8	38	0	7	0	5	2	0
	RIVERSIDE	065	847	32	0	1,028	629	756	3,292	29	500	0	356	185	0
	SACRAMENTO	067	479	18	0	573	304	422	1,796	17	336	0	267	70	0
	SAN BENITO	069	22	1	0	46	20	18	107	0	15	0	10	4	0
	SAN BERNARDINO	071	789	13	0	824	529	343	2,498	100	408	0	271	74	0
	SAN DIEGO	073	2,148	40	1	2,200	1,529	2,091	8,009	276	1,358	1	869	485	1
	SAN FRANCISCO	075	349	6	0	434	149	138	1,076	42	112	0	195	28	0
	SAN JOAQUIN	077	210	13	0	255	148	84	710	22	89	0	76	8	0
	SAN LUIS OBISPO	079	154	6	0	432	183	201	976	10	168	0	143	39	0
	SAN MATEO	081	327	4	0	635	249	282	1,497	31	221	0	197	88	1
	SANTA BARBARA	083	251	5	0	433	158	189	1,036	9	150	0	81	32	0
	SANTA CLARA	085	808	39	0	1,357	455	364	3,023	88	416	0	383	81	0
	SANTA CRUZ	087	131	8	1	281	107	135	663	4	105	0	84	21	0
	SHASTA	089	235	5	0	252	335	68	895	17	100	0	43	7	0
	SIERRA	091	4	0	0	2	0	0	6	0	0	0	0	0	0
	SISKIYOU	093	24	1	0	52	44	12	133	1	21	0	15	2	0
	SOLANO	095	218	8	0	232	130	326	914	6	152	0	91	99	0
	SONOMA	097	237	21	2	459	210	282	1,211	5	198	0	132	76	0
	STANISLAUS	099	126	2	0	158	83	75	444	4	68	0	63	8	0
	SUTTER	101	38	2	0	63	38	36	177	0	24	0	9	6	0
	TEHAMA	103	20	1	0	41	35	21	118	0	31	0	20	5	0
	TRINITY	105	5	1	0	13	4	3	26	0	3	0	3	0	0
	TULARE	107	87	0	0	165	81	51	384	2	46	0	41	7	0

Dave G. 04-14-18

Future is Bright for GA

Dave & Trish @ GaryAir <GaryAir@garyair.us>

Sat 4/14/2018 6:44 PM

To: Peterson, Eric <Eric.Peterson@rda.sccgov.org>;

Cc: Cortese, Dave <Dave.Cortese@BOS.SCCGOV.ORG>;

📎 1 attachments (180 KB)

BOS Presentation Conclusions.pdf;

Eric:

I showed the attached suggested addition to Anissa but I don't know if she added it to her presentation that will be forwarded to the BOS. Do you know if she did? Is there a way to get exactly what was forwarded to them? Maybe if you have her e-mail address I can ask her.

It would be nice if there could be an online docket for the BOS where all comments can be viewed by stakeholders and neighbors and where submissions can be made as a part of the outreach for the Business Plan, similar to what the FAA uses for NPRM's. I wonder if the FAA could set up such a facility for airport managers to use for local airport-related policy making for AIP airports.

News stories like this, <https://www.prnewswire.com/news-releases/terrafugia-inc-to-create-130-new-us-jobs-300626396.html>, and the Uber videos could also be submitted so we can impress upon the BOS that there will be a lot of additional demand for airports in the future due to emerging technologies. The Terrafugia Transition will still require an airport. In addition, Uber's Air service will require some serious discussion about where those vehicles will be allowed to land so closing or restricting airport growth makes 0 sense at this point in history. Instead we should be thinking hard about how we can make airports more compatible with their surroundings. For example, a longer Runway 31R that leverages some of the Eastridge Mall property in a future master plan update would make Reid-Hillview safer and less noisy for residents to the north of the airport because aircraft would be much higher by the time they reach those residences. Perhaps a proposal to lengthen 31R could be made along with a cap on noise levels to assure neighbors that the noise levels would be guaranteed to be at or less current levels going forward. The safety benefits of a longer runway are indisputable.

Thanks for all you do.

Dave

David A. Guerrieri
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Quotes: 408-805-4359, info@garyair.us
www.garyair.us
dave@garyair.us



Conclusion

- While GA operations levels and pilot starts have been declining globally, RHV has been largely immune to those trends. Instead operations are increasing at an amazing rate
- RHV is the busiest GA airport in the Bay Area and the 12th busiest airport in the state of California
- RHV enables the rapid and safe growth of commercial passenger services at San Jose International
- RHV has a bright future as the training airport for SJSU's Professional Flight program and other aspiring professional pilots for the next 20 years
- Santa Clara County is obligated to operate the airport in perpetuity
- The County and Airport Users, working together, have the ability to ensure the airport is fully self sufficient, a good neighbor for East San Jose, and a continued benefit for Silicon Valley as a whole
- Technological improvements in aircraft and procedures are likely going to make aircraft safer and quieter in the future.



Danny 05-22-18

FW: East Valley Airport Issues

Apex Strategies <apexstr@pacbell.net>

Wed 5/23/2018 12:25 PM

To: Peterson, Eric <Eric.Peterson@rda.sccgov.org>; Freitas, Harry <harry.freitas@rda.sccgov.org>;

For your review.

Eileen

From: ironworkrdanny@yahoo.com <ironworkrdanny@yahoo.com>

Sent: Tuesday, May 22, 2018 11:12 PM

To: ironworkrdanny@yahoo.com; Apex Strategies <apexstr@pacbell.net>

Subject: East Valley Airport Issues

Hi Eileen,

This is for Santa Clara County Airports Body that held the Meeting at Ocala on May 22, 2018.

I very much appreciated you sending me the Email Flyer Reminder for the Airport Meeting last night May 22, 2018.

I don't feel I made myself clear about the Open Space issue I spoke of. Please allow me to forward the position of Citizens that have asked me to represent them as follows;

1. Should the Airport Close or is forced to Share Space, Community Members that I represent want a Technology Driven College on that whole Site.
2. We want it to be funded and built by the Companies that are most Negatively Affecting our Community by not employing our Family members.
3. We want these Tech Companies to create a Educational College for our "local" Students. We do not want imported Students when our local schools cant get our Families a Quality Education with our Tax Dollars.
4. We want a True Educational Tech Hub Dedicated to our families that will be able to walk from their homes in the Community. When they complete their education, Graduate if you please, our Children can walk into a job with Google, Apple, Intel, and the many other major Players in this Valley. Internship and permanent positions are the real Community Goals.
5. We need to create a "feeder program" to the Tech Industry, as we do in Sports.

For example, in Wrestling we set up Programs in the Middle and Junior High Schools to feed the High School Programs. They in turn take those Student Athletes and funnel them to various Colleges with Wrestling Programs. Scholarship are available for both Mens and Women's Wrestling Programs. Our families benefit.

6. The same methods could apply at this new Educational Facility.

7. Also represented at this Educationally enhanced University, College or Tech Center should be Transit Oriented Businesses like San Jose Mineta, VTA, BART, HIGH SPEED RAIL, and San Jose Aviation.

Anissa M. 05-31-18

May 31, 2018

Ms. Sylvia Gallegos
Deputy County Executive, Santa Clara County
70 W. Hedding Street
San Jose, CA 95110

RE: Preliminary Santa Clara County Airports Business Plan Update Deficiencies

Dear Deputy Executive Gallegos,

Per your request we are providing written feedback regarding the preliminary Business Plan Update for the Santa Clara County Airports dated May 9, 2018. The business plan does not provide the Santa Clara County Board of Supervisors (BoS) with sufficient and accurate information for the supervisors to make an informed decision regarding optimal ongoing management of the county airports, Reid-Hillview (RHV) and San Martin (E16).

The following outlines major areas of deficiency in the plan dated May 9, 2018:

1. The plan recommends converting portions of airport property for non-aviation commercial lease as the primary means of generating new revenues. This recommendation is missing the following information:
 - a. Probability of the FAA to approve each parcel if accepting grants versus not accepting grants.
 - b. Probability of the FAA to approve each individual parcel regardless of accepting grants. Note: FAA approval depends upon clear benefit to civil aviation. Per FAA order 5190.6B “The non-aviation interests of the sponsor or local community, such as making land available for economic development - does not constitute an airport benefit that can be considered in justifying a release and disposal.”
 - c. Specific estimate of the time required to gain FAA approval, pursue leaseholders and secure new real property leases for each parcel.
 - d. Based on a, b and c, the revenue the County may reasonably expect to realize between now and 2031 for each parcel in both the accepting-grants and not-accepting-grants scenarios as well as scenarios whereby only percentages of parcels gain approval.
 - e. Builders interested in developing leased land typically require 30-50 year lease agreements. Recommended lease length should be stated in the plan.
2. The plan recommends eliminating the seven specialized aviation service operators (SASOs) in nine current leaseholds at Reid-Hillview and replacing them with two large fixed base operators (FBOs) in two large leaseholds.

- a. Aries Consultants stated the number of based aircraft has no correlation with the ideal number of aviation service providers at an airport. This makes the two FBO recommendation based on aircraft count comparisons with other airports appear arbitrary and not well thought out.
 - b. No FBO companies were contacted to determine interest in conducting business at RHV. In fact, it is very unlikely large chain FBOs will invest in RHV due to the lack of jet operations. Their profits are made in ramp fees associated with selling JET A fuel.
 - c. Aries Consultants recommended a combination of one or two FBOs and several SASOs to provide the aviation services needed at RHV. This is nowhere reflected in the plan.
 - d. Aries Consultants recommended lease terms of a minimum of 35 years for aviation related businesses. This is nowhere reflected in the plan.
 - e. Reducing the number of leaseholders from nine to two creates significant risk for the County if the two remaining leaseholds are not leased or if one or both future leaseholders were to become insolvent.
 - f. There is no description of a plan to transition the current aviation service providers to new service providers without significant disruption to services at RHV and E16. A poorly managed transition will result in revenue loss (not gain) as based aircraft move to other airports seeking required aviation services.
 - g. There is no incentive for existing SASO's to remain at RHV given all of the above.
 - h. The San Jose State University (SJSU) Aviation Program will become crippled in the event the two existing SASO's which currently provide the University's curriculum-required flight training find it unviable to operate at RHV. The County holds the responsibility of documenting the potential impact on the SJSU Aviation Program for the BoS and SJSU administration.
3. The plan recommends converting approximately half of the 18-acre FBO leasehold property at RHV to non-aviation commercial use.
 - a. The plan does not acknowledge that Valbridge stated the highest and best use of the entire FBO leasehold property is for aviation services and FBO leaseholds, not commercial non-aviation use.
 - b. The Valbridge lease estimates are based on leveled ground. The costs and time of demolition are not included in the plan. Nor are statements to the fact there are two underground fuel storage tanks in the proposed area listed for non-aviation commercial use.

4. The plan recommends avoiding FAA AIP grants and leveraging non-aviation leasing of airport properties to create a financially viable airport system with the hopes of “additional flexibility” and “local control.”
 - a. Thousands of airports nationwide leverage FAA AIP grants successfully to maintain self-sufficient airports. The plan needs to clarify what unique situation makes not accepting AIP grants beneficial for Santa Clara County residents and the aviation community.
 - b. The County stated benefits of “additional flexibility” and “local control” need to be documented in detail. Left undocumented, community and aviation interests must only assume the flexibility desired is to shut down the airports.
 - c. Businesses view acceptance of grants as a statement of intent to continuing operating an airport in a safe, fair and predictable manner for a specific amount of time. It is highly unlikely businesses, especially aviation businesses, will be willing to invest in new leases at the airports without grants - resulting in revenue loss, not gain.
 - d. Potential businesses will study demographics of the local airport community prior to investing. If businesses interested in airport patrons and those customers derived by this transportation hub are uncertain as to their clientele, they will not invest. Businesses not interested in airport patrons may see delayed growth as a result of the County’s uncertainty of its own direction.
5. If being able to create and enforce curfews is a desired “local control” benefit then the plan needs to address the following:
 - a. Noise curfews and operational restrictions are not governed by FAA grants. All federally obligated airports are governed by the 1990 Airport Noise and Capacity Act. Other airports have attempted to initiate curfews by avoiding grants. Even without grants those airport sponsors’ attempts have failed in court.
 - b. Many airports have seen significant reduction in late night operations simply by requesting voluntary flight restrictions. The pilot community is a law and policy abiding group yet no recent effort has been made by the County to educate the pilot community of the County’s concerns.
 - c. The curfew concept may be the result of noise complaints recorded over the years due to operations after 10PM. Noise complaint data from the Quarterly Airport Noise Reports available for Q2FY17 through Q1FY18 shows only 57 contacts. Aside from one individual (see item d) there were no complaints from the Evergreen residents related to airport activities after 10PM or before 7AM.
 - d. In addition, 71%, or 41 contacts, have come from one individual who is also the author of the “Close Reid-Hillview” website. Based on the documentation there were only 41 days with operations after 10PM in the same 12-month period.

6. FAA order 5190.6B, FAA Airport Compliance Program section 22.b states “airport land acquired with federal assistance under the AIP program and/or conveyed as surplus or non-surplus property is federally obligated in perpetuity.”
 - a. The plan does not mention the fact that the County used federal funds to purchase land for Reid-Hillview and accepted AIP grants in the early 2000’s requiring the property to be operated as an airport in perpetuity.
 - b. The BoS must be made aware of this fact. Attempting to shut down the airports in the future will result in a lengthy and costly legal battle and the probability that County will prevail is exceedingly low.
7. One of the priority reasons behind the business plan update is to maximize the assets yet no effort has gone into maximizing the current model.
 - a. Although the plan discusses lease, hangar and tie down fees going forward, it does not take the recommendation by Aries Consultants into account
 - b. There is no price elastic model done with regards to pricing of hangars and tie-downs.
 - c. The County has historically not collected receivables in a timely manner. (including tagging transient traffic for overnight payments). The business plan has no mention on how to rectify and improve accounts receivables as a method of maximizing current policy.
 - d. San Carlos airport is receiving handsome revenues by openly accepting Part 135 charter operators as well as Part 91 offshoots such as Surf Air, yet the County has explicitly denied Surf Air from utilizing the airport for their transportation business.

It is our hope that providing complete information to the business plan process will result in the Board of Supervisors making an informed decision regarding the future operations of our county airports.

Respectfully,

Scott Rohlfing
FAA Designated Pilot Examiner
Contract Pilot SEL/MEL
Gold Seal Flight Instructor
CFII, MEI, AGI, IGI

Anissa Mohler
FAA Certificated Flight Instructor
AOPA Distinguished CFI 2017
Owner and Operator of AOA, LLC.
CFII, AGI, IGI

cc: Eric Peterson, Director, Santa Clara County Airports
Harry Freitas, Director, Roads and Airports

8. We feel that Air Travel, Autos, Bus, Rail, they are all interrelated and should be studied and put together that way educationally.

This could even be employed at this Airport in Phases.

It could be built with Local Small Businesses.

Minority Businesses represented by Veterans, Disabled Veterans, Disabled Small Businesses, Minority, and Women Contractors. If High Speed Rail can insure that a 25 percent of the work force used to build is Minority Small Businesses, the the County of Santa Clara can mandate the same or better percentages.

The Tech Giants know how to manage this issue. Government Egos need not get in the way and Bring Down or Slow Down this very progressive and positive energy. The Tech Industry moves much faster then Government.

If it is designed all at once and built in Phases, then the Airport could easily be moved to the Golden Triangle. All the major Tech Industry is located right there, or moving there.

Students can get to the New Airport by the same means they use to get to the East Valley. Car or Bus routes are just as easily accessed.

When the New Airport is under Construction by our 30% Mandated Minority Contractors, Flights could go and come over water and Businesses, not schools, shopping Centers, Parks, and Homes.

"Touch and Go" - landings and take-offs will not be a issue any longer. There will only be Businesses and the San Francisco Bay to fly over.

New Facilities, New Runways, Quality Construction requiring less maintenance would save Tax Dollars on the Bottom Line.

Please forward This position to the appropriate authorities to be put on the record.

Thank you very much for allowing me to respectfully address the future of the East Valley Community.

In community spirit,
Danny

Sent from my MetroPCS 4G LTE Android device

May 9 Preliminary Business Plan Update

Paul Marshall Comments revision 2

Congratulations to county staff and their consultants for pulling together a comprehensive business plan update in such a short time. It is clear that there is much deferred airport work to be done, and that airport revenues have not kept pace with inflation for a long time. Substantial new revenues and grant monies are needed to realize the full potential of our airports. This summary review provides my feedback to county staff and supervisors on key airport issues addressed in the update.

The plan identifies \$20M worth of airport projects to be funded. Additional key airport projects include:

- Precision WAAS instrument approach engineering and surveys at E16 and KRHV to allow instrument approaches to lowest minimums during stormy weather and at night
- Deferred repairs and renovations and to the old hangars and buildings and pavement at E16 and RHV that will come into the county's possession in 3 years when existing leases expire,
- pavement maintenance for the large tie down areas on county land at RHV and E16,
- ground squirrel eradication so that a) unpaved areas may be used to tie down helicopters and planes without fear of cave-in, and b) so that large raptors will not be drawn to the airport causing aircraft bird strikes with associated property damage and potential pilot injury/death
- possible deferred maintenance to gas dock areas if the county assumes control of fueling operations.

\$1M per year of new revenues is identified from current tenants at RHV and E16 who will be adversely affected with price increases when their leases turn over to the county. It is not clear how high rates will have to go to generate these new revenues, and whether or not an appropriate discount would be applied to those rates to reflect the less desirable physical condition of many of those older properties to be taken control of by the county. I reserve further comment in this area pending availability of proposed rate schedules.

Under the proposed plan update, RHV business leaseholders would be further impaired by the reduction of approximately 50% of their leasehold space to be used for nonaviation purposes. Take a look at Figures 1 and 2 below and you can see 172 planes tied down on the ramp in the area that would be carved up, compared with just 37 planes tied down on the county side (with many more out of sight under the shelters and in the hangars). Reduction of businesses at RHV from 9 (or 7) to 2 could adversely affect both the business owners and the airport tenants who use their services – no analysis was presented to gauge the impact, other than to note that substantially more money could be earned for the AEF. Such a move should be avoided without further study. For instance the Aries report (Figure 3) shows that Reid Hillview has a normal number of businesses compared with other wealthy, high-volume general aviation airports. Perhaps the better thing to do is to just normalize the rates to aviation market levels for the lease holders for their airport buildings and land (from 2021 forward). Otherwise the taking of actively used airport land and converting it to general commercial use might appear like the first step in closing down the entire airport. If not all the existing businesses can pay a fair rent and need to close shop after rental rate adjustment, then that may be the time to convert the unused land to

general commercial use. There is no AEF need for the possible tripling of revenue that all of the identified projects including this carve up would provide, and this project could be dropped while still providing plenty of revenue to pay for needed work.

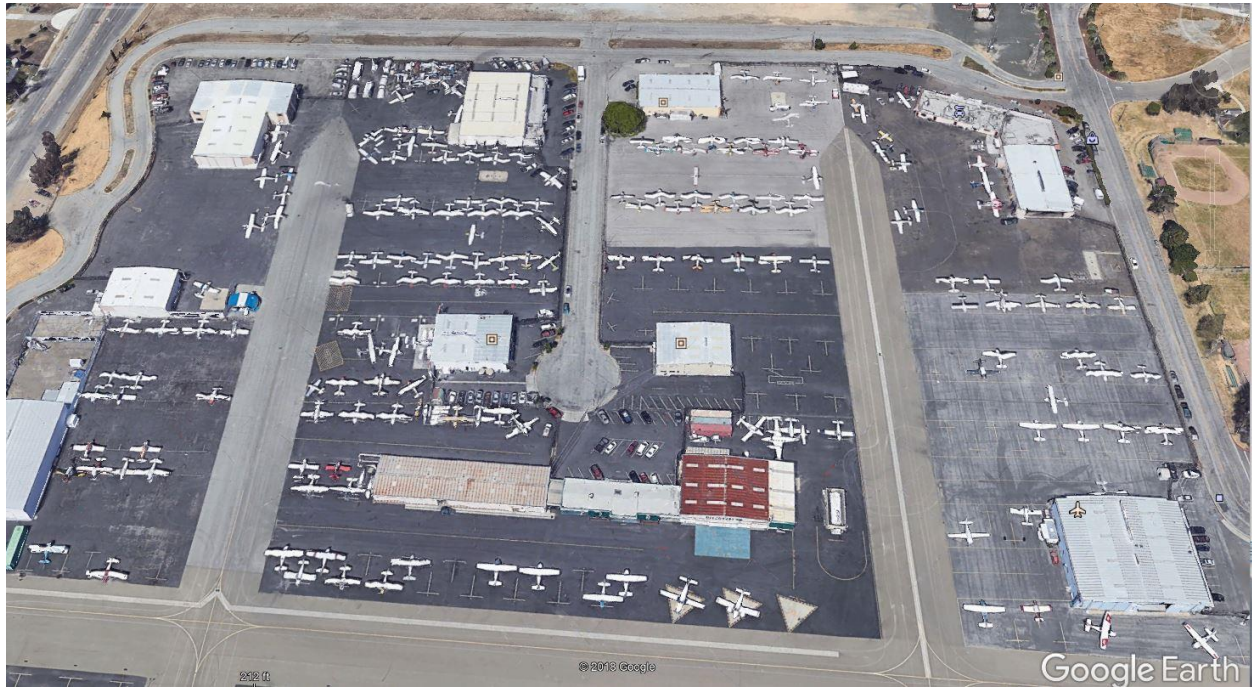


Figure 1 – leaseholds 1 through 9 have 172 planes tied down and would be highly disrupted by the tentative plan to replace the northeastern sector with general commercial property.



Figure 2 – There are only 37 planes tied down on the county ramp, along with nearly full shelters and hangars. Tie downs provide much less revenue than shelters and hangars. It is good to have vacant ramp space which can be used in an emergency for extra helicopters, planes, commodity points of distribution and/or tent cities for emergency workers. Lost tie down revenue is recovered through marking leaseholders rates to aviation market. It is fine to leave the majority of planes on the northeast side.

TABLE 3-1 – FBO AND SASO SERVICES

AIRPORT	FBO	SASO	FUEL PROVIDERS	BASED AIRCRAFT	ANNUAL AIRCRAFT OPERATIONS
Reid-Hillview	0	7	4	477	162,648
San Martin	1	0	1	150	33,166
Palo Alto	2	6	2	190	148,769
San Jose International	2	0	2	66	34,514
Buchanan Field	3	9	3	407	120,044
Byron	0	0	1 ^a	102	83,075
Gnoss Field	1	2	1	202	97,800
Half Moon Bay	0	0	1 ^a	56	50,150
Hayward Executive	2	33	2	360	102,059
Hollister Municipal	0	1	1	108	56,920
Livermore Municipal	1	2	1	462	130,656
Napa County	1	0	1	185	49,842
Nut Tree	0	3	1 ^a	175	101,500
San Carlos	0	6	1	352	104,106
Salinas Municipal	0	1	1	179	58,228
Watsonville Municipal	0	6	2	382	60,000

Figure 3 – At 7 SASOs, Reid Hillview is right in line with other busy, wealthy, healthy general aviation airports. It appears that the total level of service would be reduced shrinking from 7 SASO businesses to 2 FBOs. A greater number of businesses would appear to serve more diverse markets.

The proposed Tully & Capitol, Laydown, and Swift leases are advantageous in that they give the AEF more annual revenue to fund payment streams for capital projects, and take pressure off airport users to pay for all the projects.

Be sure to start taking FAA grant money again – it further reduces the strain on airport users to pay for that which they don't need to pay, and it shows to everyone that the county has a commitment to **operate the airports for the long haul and not convert them to commercial use a few years down the line**. In general the county will not get leaseholders to invest in good businesses if they are not confident that there is at least a 30 year horizon to operate the airport as an airport. FAA rules may seem burdensome, but they are the right way to operate an airport – the more we deviate, the greater is the potential for harm to our airports.

Our airports are a vital part of the rich infrastructure that makes Santa Clara County a wonderful place to live, a great place to do business, and a resilient community that can roll with any punch mother nature can throw at us. Let's keep them strong for the long haul and boost revenues while maintaining cost effective services for airport users and businesses.

Joel W. 05-15-18

Fwd: GAMA Data Shows Aircraft Sales Numbers Climbing

Joel Williams <joel@emlinux.com>

Tue 5/15/2018 8:08 PM

To: Peterson, Eric <Eric.Peterson@rda.sccgov.org>;

Eric,

RE: my comments at tonights Airport Commission meeting regarding the decline in GA.

I came home to find a link to this in my inbox:

<https://www.flyingmag.com/gama-report-shows-positive-trend-in-ga-shipments?enews051518>

...

Nearly all segments of GA manufacturing saw improvements in deliveries.

....

----- Forwarded Message -----

Subject:GAMA Data Shows Aircraft Sales Numbers Climbing

Date:15 May 2018 21:32:35 +0000

From:Flying <newsletters@mail.flyingmag.com>

To:joel@emlinux.com <joel@emlinux.com>

GAMA Data Shows Aircraft Sales Numbers Climbing

No images? View Online.



Flying Magazine

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GAMA Report Shows Positive Trend in GA Shipments

2018 starts out strong for most aircraft segments.

Cessna Turbo Skyhawk

Cessna Discontinues Skyhawk JT-A Production

The diesel 172 is no more after a market for the light trainer failed to materialize.



 ntsb loss of control

NTSB Recaps Loss of Control Roundtable

More than 1,500 people have died in LOC accidents in the past 10 years.

 article

 air mail 100 year flight

Historic Biplanes Recreate First Airmail Flight

Only seven of the original 41 Stearman Speedmail aircraft are still flying.

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 Just Aircraft Just 103 Aircraft

Just Aircraft Introduces Single-seat Ultralight

Light Sport manufacturer expects to launch final Just 103 design at AirVenture.

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An Alpha Male Flirts with Bravo Airspace on a Sightseeing Excursion

I Learned about Flying from That, No. 927.

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The ATC system absolutely ain't broke. Let's not let people who don't have a clue how well it works try to fix it.



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GAMA Report Shows Positive Trend in GA Shipments

2018 starts out strong for most aircraft segments.

By PIA BERGQVIST MAY 15, 2018

0 Comments

The General Aviation Manufacturers Association released its first quarterly shipment report for 2018 last week, which indicates an overall upward trend in the industry. “Training needs are driving the demands in the rotorcraft segment, while a stabilizing used market, overall global economic growth and aviation innovation are driving the other segment increases,” GAMA’s president and CEO Pete Bunce said. Bunce expects the positive trend to continue, citing the introduction of new products as the catalyst for continued growth.


Nearly all segments of GA manufacturing saw improvements in deliveries. But the piston rotorcraft market was the strongest by far with an increase of nearly 40 percent from 58 piston helicopters delivered in the first quarter of 2017 to 81 this year. Turbine rotorcraft also saw increases in deliveries, though only by 7 percent. In total, the helicopter market pulled in \$0.67 billion, an increase of 18.3 percent over last year’s billings.

Article Continues Below:

FLYING

Aerobatics with Matt

Flying magazine met up with

Powered By 

Total airplane billings increased from \$3.71 billion to \$3.83 billion, a welcome increase of 3.3 percent after an overall decline in 2017 of 4.2 percent over the 2016. The biggest turnaround was seen in the turboprop market where shipments increased by 12.7 percent in the first quarter over last year's numbers. This is an encouraging trend after the segment saw a decline in shipments from 2016 to 2017. Textron Aviation's Beechcraft King Air line was the big winner, delivering 17 twin turboprops, up from 12 during the same time in 2017.

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The bizjet market continued its slow growth, increasing by 1.5 percent over the past year with 132 airplanes delivered while piston airplane deliveries were down by 1.5 percent.

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Bud B. 06-04-18

06/04/18

I would like to say that overall I agree with the 2018 RHV Business Plan (BP). All things considered, it is reasonable in its approach, and recommendations. However, there are three comments, and a suggestion, I would like to make in regard to the BP.

Comment 1:

My first comment is in regard to a BP statement that I feel should be rewritten for accuracy.

To start, I completely agree that the utter majority of activity at RHV is from the flight schools. It has been this way for decades. I even mentioned in 2000, "Eliminate the flight schools and RHV becomes a ghost town." [1]

RHV is overwhelmingly a recreational airport. This means that when the economy is good then some people with discretionary income will take flying lessons, and maybe a fortunate few will buy a plane. When the economy is weak, or bad, people are more cautious with their discretionary income, will cut back on expensive recreational activities, and sell their planes. This boom and bust cycle has been going on for years, and there is no reason to think the current activity at RHV is not following this model.

This leads to my first comment. In the memo overview to the BP we have this quote; "Nevertheless, the number of operations at the County airports is growing due to the demand for professional pilots and the associated flight schools required to train them.", and on page 11 of the BP we have this quote, "The increase in the number of flight training operations has its roots in several commercial aviation trends that have increased demand for commercial and Airline Transport (ATP) rated pilots:"

All other statements about general aviation in the BP are backed up with references, but as written, these statements appear to be an opinion being presented as a fact.

In regard to the idea that the current activity at RHV is being driven by the airline industry, it needs to be emphasized that **it is not the responsibility of Santa Clara County (SCC) taxpayers to provide the airlines with pilots.** I seriously doubt that the County Supervisors were thinking of the airlines when they purchased the 60 acre Hillview Airport in 1961.

While it is probably true that some student pilots have an aspiration to be a professional pilot, we know from research done by the Aircraft Owners and Pilot Association (AOPA) that most student pilots are doing it for recreation. [2] Additionally, thanks to AOPA we know that 80%, or more, of all student pilots will drop out, and never get their Private Pilot license, let alone become a professional pilots. [3]

There is no reason to assume that RHV somehow deviates from national averages.

Since there is no data to support the statement that the demand for professional pilots is driving the current activity at RHV, I would like to see the sentence on page 11 rewritten to reflect that the good economy is having an effect on increasing the activity at RHV.

For example, instead of "The increase in the number of flight training operations has its roots in several commercial aviation trends that have increased demand for commercial and Airline Transport (ATP) rated pilots:" to be more accurate it should be something like,

“The current increase of activity at RHV mostly appears to be based on the improving Santa Clara County economy of the last five years. Once the economy cools off we most likely will see a decrease in activity at RHV, as we have in the past.”

However, whether the increase of flight school activity has its roots in the economy, or the needs of the airline industry, it is a moot point. The fact is, **no one should be learning how to fly an airplane in the middle of a residential neighborhood.** No SCC resident, and certainly no “students from all over the world, including Japan, China, India and Korea.” [4], should be learning how to fly an airplane at RHV. Flight training is a totally and utterly incompatible activity with a residential neighborhood.

Comment 2:

The second comment is in regard as to whether to accept, or not accept, future FAA Grant money. Since general aviation, as practiced at RHV, will most likely continue its ongoing decline, it would be wise to hold-off on accepting FAA Grant money. In 2031, we can reevaluate the status of general aviation, RHV, and any other needs of SCC at that time. Based on current data and trends in general aviation, it does not make sense for the county to accept FAA money, and forfeit control of this land. In fact, I feel it would be highly irresponsible for the county to accept FAA money, and forfeit control of the land for an additional twenty years. This is county land, and **the county has a fiduciary responsibility to manage this land in a manner that benefits all county residents**, not just for the few hundred who use RHV.

Comment 3:

This leads to my third comment. I understand the scope of the BP is explained on pages 7-8 of the BP, and I am disappointed the County Supervisors neglected to include the impact of the airport on the adjacent neighborhood. While the county acts as if RHV is located in the middle of a desert, in reality it is located in the middle of a residential neighborhood. There are easily 5,000 to 10,000 people, and 9 schools, within one-half mile of RHV [5], and I suspect many individuals, and students, are negatively affected by the activity at RHV. Yet the county never gives any consideration to them.

There is plenty of data on the Internet detailing the negative mental and physical health effects from noise in general, and airplane noise in particular. Simply Google “noise negative health effect”, or anything similar.

Additionally, we know RHV aircraft use leaded fuel (2.12 grams per gallon), and 90% (2 grams) of the lead is emitted in the exhaust. We also know that the majority of aircraft activity at RHV is from pilots simply flying in circles (local operations) around the airport, and putting lead into the air that is then inhaled by residents in the neighborhoods surrounding the airport. We also know that inhaled airborne lead is absorbed into the blood, and we know that any amount of lead in the blood of a child can result in permanent, measurable cognitive impairment (brain damage).

This is not speculation. This is not hypothetical. This is a fact. The research is done, and the data is irrefutable. [6]

In the Mercury News of 3/11/18 page B3, the paper states that Supervisor Yeager argues that the ordinance to remove gun shows from the Fairgrounds “is consistent with the county’s mission to promote public health and safety.” [7]

While I agree with the removal of gun shows from the fairground, I am not aware of anyone being injured at these shows. Yet, we know for a fact that RHV is negatively affecting the health of county residents on a daily basis, and the county does absolutely nothing about it. This strikes me as being hypocritical. At best.

Suggestion:

Finally, my suggestion for the BP is that until RHV is closed we should consider redesigning RHV to satisfy most general aviation needs, make RHV much more compatible with the surrounding neighborhood, and benefit all county residents.

This suggestion consists of these items, and I will explain each below.

1. Stop accepting FAA Grant money
2. Ban all flight schools from RHV
3. Close runway 31L/13R.
4. Limit airport hours of operation between 7 AM and 10 PM
5. Remove 31L/13R and make the land on the west side a park for all county residents.

Each item.

1. By no longer accepting FAA money the county is free of prior grant obligations. The FAA enforces grant violations by no longer giving grant money to a sponsor. So, by not taking grant money, the restrictions are moot.
2. The flight schools generate the vast majority of aircraft operations at RHV. No one should be learning how to fly an airplane in the middle of a residential neighborhood. Additionally, removing the flight schools will greatly reduce the noise and lead pollution from RHV.
3. Without the flight schools, aviation activity at RHV will drop to near zero. Therefore, runway 31L/13R is no longer needed. The remaining runway (31R/13L) is more than adequate for the few operations that are not flight school related. Plus, RHV is still a reliever airport for SJC.
4. These hours are the same hours the FAA Control Tower is open. This is more than adequate for the few non-student flights that occur at night. Even more important, it provides much needed peace and quiet for neighborhood residents, many of whom get up at 4-5 AM for work.
5. By removing 31L/13R, and building a park on the west side of the airport we can provide much needed soccer fields, and other facilities for all county residents to use and enjoy. Of course, they will be exposed to the lead pollution from RHV, but without the flight schools it will be minimal.

Granted, some people will oppose this, but it is the right thing to do. It benefits both the aviation community, and everyone else.

Thank you for the opportunity to comment on the 2018 RHV Business Plan.

Bud Beacham
ESJ resident since July 1990
SCC Airport Commissioner

[1] <http://www.reidhillview.com/#3>

[2] http://download.aopa.org/epilot/2011/AOPA_Research-The_Flight_Training_Experience.pdf

“Recreational goals are the most common reason for learning to fly and most students learn outside the Part 141 environment.”, page 44

[3] http://download.aopa.org/epilot/2011/AOPA_Research-The_Flight_Training_Experience.pdf

“Approximately 60 percent of those who earn a student pilot certificate never earn a higher pilot certificate (e.g., private, recreational, or sport). And many more drop out before ever obtaining a student pilot certificate—**placing the overall dropout rate at an estimated 70 to 80 percent.**”, page 2

[4] Santa Clara County Airports Business Plan, 2018 draft, page 11.

“A number of flight training schools operate at RHV and attract students from all over the world, including Japan, China, India and Korea.”

[5] http://www.reidhillview.com/RHV_brochure.pdf

[6] <http://www.reidhillview.com/#lead>

[7] The quote is from the article, which I suspect is paraphrasing Supervisor Yeager.



Date: June 1, 2018

From: CAAPSO

To: Eric Peterson, Santa Clara County Airports

Subject: CAPPSSO response to the May 9, 2018 Draft Airports Business Plan

Eric-

Harry Freitas indicated at the Community meeting in San Jose on May 22 that he welcomed additional comments, responses and suggestions to “improve” the Business Plan drafted by airport staff and Mike Murdter, with assistance of a variety of various consultants.. While several CAAPSO members spoke at both the Airport Commission meeting and the community outreach meetings, CAAPSO wanted to consolidate comments and formally respond to the draft plan. CAAPSO now represents several hundred members with an interest in Santa Clara County airports, and members include tenants and lessees, community members in the neighborhood, pilots and aircraft owners, and students and staff at San Jose State University.

CAAPSO is disappointed with the Business Plan, and hopes the Supervisors will reject it and advise staff to revise the Plan based on the following issues and concerns:

1. The report fails to confront and address the issue of refusal to accept FAA grant funding and either justify clearly the reasons for refusal or identify the full benefits of accepting grants. The Plan simply restates a pre-existing conclusion (apparently of Mr. Murdter with no further explanation, echoing his 2016 letter to airport tenants) that “flexibility” with respect to the property of the airports justifies turning down potentially more than \$10 Million during the study period, which might balance the Airport Enterprise Fund, repay the \$3 Million loan for current repaving, and enhance prospects for FAA approval of non-aviation usage for airport properties not needed for aviation. Continuing to refuse federal grants will send a clear message of intent to close Reid Hillview Airport, and likely

discourage any investment into the facility or buildings. The issue of grant funding needs a full and open discussion of real pro's and con's and the Supervisors need to be presented with options and their consequences

2. The Plan's presumed consolidation of FBO/SASO sites and leases at Reid Hillview from 9 to 2 is unrealistic and not credible. The proposed second FBO at San Martin airport is also unrealistic, without a commitment past 2031. Current leases run another 3 years, and Harry confirmed at the public meeting that RFP's and development approvals for new FBO's could take years. No reasonable business would invest substantial sums in facilities for the new FBO sites without a longer term commitment from the county to maintain the airport beyond 2031. There is no Return on Investment possible over a 5 to 7 year expected life of an FBO facility, and the ARIES consultant report affirmed that. Businesses need long-term stability to plan for and make investments in buildings and facilities, and the county's plan does not provide that commitment. In addition, failure to renew leases for current leaseholders past 2021 will lead to those businesses shutting down, depriving airport users of local options for maintenance, avionics service, fuel and flight training. If those businesses disappear, the number of based aircraft will decline.
3. The Plan's presumptions around commercial development of "Non-Aviation" use properties are also seriously flawed, as the staff acknowledged on May 22nd that prior requests to the FAA have been rejected, and that no effort was made during the preparation of the Business Plan to even discuss possible paths to approval directly with the FAA. Apparently the county is relying on a legal strategy of litigation as the primary means of enabling these developments. Such litigation is likely to be lengthy, expensive and result in uncertain outcomes. Even the revised inclusion of the county's expectation that the market rental value of the Little League fields will be transferred into the AEF from "some other county budget" is completely unsupported and speculative.
4. While the Plan mentions FAA grant funding in historical terms as providing several hundred thousand dollars per year, there is evidence to suggest substantially larger grants could be made available to Reid Hillview as a critical designated Reliever for San Jose Mineta Airport, serving a critical role in emergency services/disaster relief and in continuing to enable the rapid growth of San Jose Mineta Airport. Palo Alto Airport is receiving nearly \$9 million in grant funding from the FAA to completely refurbish aircraft parking and taxi facilities, in addition to runway maintenance. In addition, the new multi-year FAA

Authorization Bill just passed in Washington provides for substantial increases in grant funding for critical general aviation reliever airports.

For these reasons, CAAPSO requests the Business Plan be revised to address the issues of grant funding more directly, and that the presumptions and recommendations around FBO developments and non-aviation use development be revised to reflect a more realistic view of the true potential impact on airport revenues.

Regards,

David Goodin

President CAAPSO
www.CAAPSO.org
408/921-5901