



Runway Utilization Report

Winter Peak Period 2024-2025
Prepared by David Van Quest

The runway utilization report

shows operations filtered by wind speeds under four knots which are considered 'calm.' During calm winds, pilots and air traffic controller (ATC) have more options regarding runway selection, however calm winds alone do not equate to every runway being available. Each morning, ATC staff look at several factors including: current and forecasted weather conditions, surface winds, winds aloft, Sierra crest weather and scheduled IFR traffic to determine which runway(s) to use. Runway length also plays a factor in a pilot's decision, and some will choose the longest runway despite the winds based on their aircraft requirements or personal safety margins.

Data tables on the following page show operations by runway and aircraft type in calm winds during the past two winter to track change

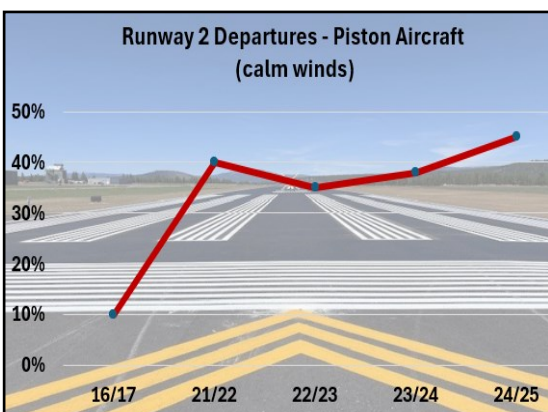
year to year. The actual counts are provided in addition to *the percentages* which is the key to analyzing runway utilization. Also for comparison is the relative difference in percentages which shows the change in runway use *percentages*. This is not to be mistaken for a change in actual operation counts which are better analyzed in other Truckee Tahoe Airport publications such as the quarterly Operations & Community Comment Tracking Charts most recently published in the April 23 board meeting.

This past winter saw the highest share of Piston departures off Runway 2 since we started tracking this statistic four years ago. At 45%, this number was equal to the number of Piston departures off Runway 29, which is a noteworthy figure. Since jets and turboprops mostly require Runway 11/29, Piston operations

are a good measure of how well we're able to disperse traffic and use "quieter" departures. Previous versions of this report compared data against the winter of 16/17 when we did not have an air traffic control tower. That winter saw just 10% of Piston departures off Runway 2 so a significant shift has occurred over time. The effort to move traffic to Runway 2 has included direct outreach to pilots, ATC routinely assigning it for departures, and new artwork that advertises Runway 2 as the "quietest departure." This art is found in several places around the airport and, new this winter, on the 100LL fuel truck which may have contributed to the 6% increase in departures from last year.



Runway 2 wrap on 100LL fuel truck



Runway 2 use over time. Winter 16/17 was pre-tower

Moving into summer we will likely see a lower share of departures off Runway 2 than in winter, likely around 28%. This is due to the traffic conflict that occurs once the glider operations begin. With gliders using Runway 20, ATC is often unable to launch traffic off Runway 2 as this creates opposite direction operations, however ATC strives to assign light aircraft Runway 2 for departures when able.

Calm Wind Operations (0-3 knots)

Winter Peak Period 2024/2025

December 15 — April 15

All Aircraft	2023/2024		
Runway	Arrivals	Departures	All
RWY 11	6%	8%	7%
RWY 2	5%	25%	15%
RWY 20	11%	4%	8%
RWY 29	72%	58%	65%
Unknown	6%	5%	6%

Operations: 4,280

2024/2025		
Arrivals	Departures	All
5%	7%	6%
7%	30%	19%
8%	2%	5%
75%	54%	65%
5%	6%	6%

Operations: 5,108

Change		
Arrivals	Departures	All
-1%	-1%	-1%
2%	6%	4%
-3%	-2%	-3%
3%	-4%	0%
-1%	1%	0%

Operations: 828

Jet	2023/2024		
Runway	Arrivals	Departures	All
RWY 11	18%	2%	10%
RWY 2	0%	1%	0%
RWY 20	8%	0%	4%
RWY 29	73%	97%	85%
Unknown	1%	0%	1%

Operations: 589

2024/2025		
Arrivals	Departures	All
12%	3%	8%
0%	0%	0%
8%	0%	4%
79%	96%	87%
1%	0%	0%

Operations: 742

Change		
Arrivals	Departures	All
-6%	1%	-3%
0%	0%	0%
1%	0%	0%
6%	0%	3%
0%	0%	0%

Operations: 153

Turboprop	2023/2024		
Runway	Arrivals	Departures	All
RWY 11	3%	16%	10%
RWY 2	0%	5%	3%
RWY 20	13%	1%	7%
RWY 29	78%	73%	75%
Unknown	5%	5%	5%

Operations: 882

2024/2025		
Arrivals	Departures	All
4%	20%	12%
2%	8%	5%
9%	0%	5%
82%	67%	74%
3%	5%	4%

Operations: 880

Change		
Arrivals	Departures	All
1%	4%	2%
2%	3%	2%
-4%	-1%	-2%
4%	-6%	-1%
-2%	0%	-1%

Operations: -2

Piston	2023/2024		
Runway	Arrivals	Departures	All
RWY 11	3%	7%	5%
RWY 2	9%	38%	23%
RWY 20	11%	5%	8%
RWY 29	74%	47%	61%
Unknown	3%	2%	3%

Operations: 2,597

2024/2025		
Arrivals	Departures	All
3%	4%	3%
10%	45%	28%
7%	3%	5%
77%	45%	61%
3%	3%	3%

Operations: 3,259

Change		
Arrivals	Departures	All
0%	-3%	-2%
2%	6%	4%
-4%	-2%	-3%
3%	-2%	0%
-1%	1%	0%

Operations: 662