



Runway Utilization Report

Winter Peak Period 2023-2024
Prepared by David Van Quest

The runway utilization report shows operations filtered by wind speeds under four knots which are considered ‘calm.’ The operations of this past winter are compared to those in 2016-2017 to analyze runway utilization before the air traffic control tower was in place. 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 winters of 2016-2017 and 2023-2024. 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 24 board meeting.

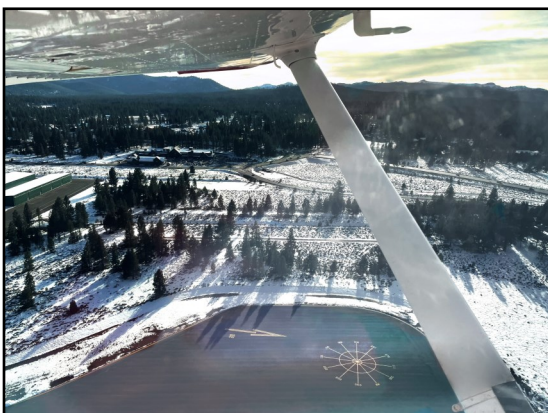
Runway 2/20 closed for reconstruction last July and re-opened mid-November. With the runway reconstructed and freshly paved, some pilots noted that it was much smoother than before and were now more willing to depart on it. One local pilot in particular flew 11 departures off Runway 2 this winter compared to zero last year, flying all 15 on Runway 29. Piston aircraft are most likely to use the shorter runway and this past winter we saw 38% of piston departures off Runway 2 compared to just 10% in 2016-17. This winter also

saw a 24% decrease in piston departures off Runway 29, a substantial change from 2016-17. Turbo-prop departures off Runway 11 increased 14% compared to 2016-17 but this is mainly because of the new executive hangars on the west end of the airfield that opened in 2019.



New pavement and fresh paint on Runway 2

Looking forward to the approaching glider season, which resumes late May, there will likely be a decreased use of Runway 2 and an increased use of Runway 29. This trend is common due to the frequent glider operations using Runway 20, which creates a conflict for ATC to depart aircraft off Runway 2 into opposite direction operations. When glider operations are not an issue, ATC staff will strive to assign light aircraft Runway 2 for departures when able.



11 Runup area markings guide pilots to bypass bridge

Calm Wind Operations (0-3 knots)

Winter Peak Period

December 15 — April 15

All Aircraft		2016-2017		
Runway	Arrivals	Departures	All	
RWY 11	8%	3%	5%	
RWY 2	3%	8%	5%	
RWY 20	7%	1%	4%	
RWY 29	68%	76%	72%	
Unknown	14%	12%	13%	

Operations: 4,281

2023-2024		
Arrivals	Departures	All
6%	8%	7%
5%	25%	15%
11%	4%	8%
72%	58%	65%
6%	5%	6%

Operations: 4,280

Change		
Arrivals	Departures	All
-3%	6%	2%
3%	16%	10%
4%	2%	3%
4%	-18%	-7%
-8%	-7%	-7%

Jet		2016-2017		
Runway	Arrivals	Departures	All	
RWY 11	21%	3%	13%	
RWY 2	1%	2%	1%	
RWY 20	5%	1%	3%	
RWY 29	70%	84%	77%	
Unknown	3%	10%	6%	

Operations: 647

2023-2024		
Arrivals	Departures	All
18%	2%	10%
0%	1%	0%
8%	0%	4%
73%	97%	85%
1%	0%	1%

Operations: 589

Change		
Arrivals	Departures	All
-3%	-1%	-2%
-1%	-1%	-1%
3%	-1%	1%
3%	12%	8%
-2%	-9%	-6%

Turboprop		2016-2017		
Runway	Arrivals	Departures	All	
RWY 11	6%	3%	4%	
RWY 2	1%	10%	5%	
RWY 20	8%	1%	4%	
RWY 29	75%	78%	76%	
Unknown	11%	8%	10%	

Operations: 1,205

2023-2024		
Arrivals	Departures	All
3%	16%	10%
0%	5%	3%
13%	1%	7%
78%	73%	75%
5%	5%	5%

Operations: 882

Change		
Arrivals	Departures	All
-2%	14%	6%
0%	-5%	-3%
5%	0%	2%
3%	-5%	-1%
-6%	-3%	-4%

Piston		2016-2017		
Runway	Arrivals	Departures	All	
RWY 11	4%	2%	3%	
RWY 2	3%	10%	6%	
RWY 20	7%	2%	4%	
RWY 29	65%	71%	68%	
Unknown	21%	15%	18%	

Operations: 2,026

2023-2024		
Arrivals	Departures	All
3%	7%	5%
9%	38%	23%
11%	5%	8%
74%	47%	61%
3%	2%	3%

Operations: 2,597

Change		
Arrivals	Departures	All
-1%	5%	2%
6%	28%	17%
4%	3%	4%
9%	-24%	-8%
-17%	-13%	-15%