

Runway Utilization

Report

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 summers of 2022 and 2024 to



11 Runup area markings guide pilots to bypass bridge

track change over time. In 2023 Runway 2/20 was closed for reconstruction, so 2022 is used for comparison. 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 analvzed in other Truckee Tahoe Airport publications such as the quarterly Operations & Community Comment Tracking Charts most recently published in the October 23 board meeting.

Overall the numbers show that all aircraft types primarily use Runway 29. In the summertime when gliders are operating it creates a conflict for ATC to depart aircraft off Runway 2 into opposite direction

> operations, however ATC strives to assign light aircraft Runway 2 for departures when able. When winds are calm, Jets almost exclusively use 29. Turboprops mostly use 29 as well but 11 also sees some use. Piston aircraft have the most runway diversity and this summer,

Summer Peak Period 2024 Prepared by David Van Quest

piston departures off 29 totaled 45% with Runway 2 a near second at 30%. The use of Runway 2 by pistons was up 7% this summer compared to 2022 and departures off 29 decreased by 6%.



Runway 2 wrap on 100LL fuel truck

The 100LL fuel truck received a new look this August with the addition of our 'Preferred Quiet Runway' artwork. Now, any pilot who needs fuel for a piston aircraft will see this message either on the full service fuel truck or at the self-serv fuel pump. This artwork is also featured on the 5x7" Noise Abatement cards that can be found inside the airport terminal building. The next **Runway Utilization Report which** reviews our winter peak period operations will be a good measurement to compare the use of Runway 2 and see if the additional messaging is helpful in influencing pilot behavior.

Calm Wind Operations (0-3 knots) Summer Peak Period 2024

| | 2022 | |
|----------|------------------------|---|
| Arrivals | Departures | All |
| 6% | 6% | 6% |
| 2% | 16% | 10% |
| 10% | 8% | 9% |
| 70% | 63% | 66% |
| 11% | 7% | 9% |
| | 6% 2% 10% 70% | Arrivals Departures 6% 6% 2% 16% 10% 8% 70% 63% |

Operations: 5,659

| Jet | 2022 | | |
|---------|----------|------------|------|
| Runway | Arrivals | Departures | All |
| RWY 11 | 15% | 5% | 10% |
| RWY 2 | None | None | None |
| RWY 20 | 4% | None | 2% |
| RWY 29 | 79% | 94% | 87% |
| Unknown | 2% | 1% | 2% |

Operations: 1,079

| Turboprop | | 2022 | |
|-----------|----------|------------|-----|
| Runway | Arrivals | Departures | All |
| RWY 11 | 5% | 10% | 8% |
| RWY 2 | None | 6% | 3% |
| RWY 20 | 10% | 6% | 8% |
| RWY 29 | 77% | 73% | 75% |
| Unknown | 7% | 5% | 6% |

Operations: 1,079

| Piston | 2022 | | |
|---------|----------|------------|-----|
| Runway | Arrivals | Departures | All |
| RWY 11 | 3% | 5% | 4% |
| RWY 2 | 3% | 24% | 15% |
| RWY 20 | 12% | 11% | 12% |
| RWY 29 | 66% | 51% | 58% |
| Unknown | 15% | 9% | 12% |

Operations: 3,397

| 2024 | | |
|------------|---|--|
| Departures | All | |
| 7% | 6% | |
| 20% | 12% | |
| 10% | 11% | |
| 56% | 64% | |
| 7% | 8% | |
| | Departures 7% 20% 10% 56% | |

Operations: 6,146

| | 2024 | |
|----------|------------|------|
| Arrivals | Departures | All |
| 6% | 2% | 4% |
| None | None | None |
| 3% | None | 2% |
| 89% | 97% | 93% |
| 1% | 1% | 1% |

Operations: 1,010

| | 2024 | |
|----------|------------|-----|
| Arrivals | Departures | All |
| 3% | 17% | 10% |
| None | 4% | 2% |
| 3% | 2% | 3% |
| 87% | 71% | 79% |
| 6% | 5% | 5% |

Operations: 966

| | 2024 | |
|----------|------------|-----|
| Arrivals | Departures | All |
| 3% | 6% | 5% |
| 4% | 30% | 18% |
| 17% | 14% | 16% |
| 68% | 45% | 56% |
| 7% | 5% | 6% |

Operations: 3,842

June 15 — September 15

| | Change | |
|----------|------------|-----|
| Arrivals | Departures | All |
| -3% | 1% | -1% |
| 1% | 4% | 2% |
| 2% | 2% | 2% |
| 2% | -7% | -2% |
| -2% | N/A | -1% |

| | Change | |
|----------|------------|-----|
| Arrivals | Departures | All |
| -8% | -3% | -5% |
| N/A | N/A | N/A |
| -1% | N/A | N/A |
| 10% | 3% | 6% |
| -1% | N/A | N/A |

| | Change | |
|----------|------------|-----|
| Arrivals | Departures | All |
| -2% | 7% | 2% |
| N/A | -1% | -1% |
| -7% | -3% | -5% |
| 10% | -2% | 4% |
| -1% | N/A | -1% |

| | Change | |
|----------|------------|-----|
| Arrivals | Departures | All |
| -1% | 1% | 0% |
| 1% | 6% | 3% |
| 5% | 3% | 4% |
| 3% | -6% | -2% |
| -8% | -3% | -6% |