Summary of Measured Noise Levels

in the

Town of Superior, Colorado

due to

Rocky Mountain Metropolitan Airport Operations

April 2026

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ACOUSTICS AND VIBRATION CONSULTING

Monthly Summary – April 2026 (Water Bladder Site)

The following summarizes the daytime noise levels measured at the Water Bladder measurement location located off S. Torreys Peak Dr. and aircraft operations detected over the Town of Superior for the month of April 2026. Additional information regarding the measurements follows.

- Over the entire month, a total of 7,582 aircraft operations[1] occurred within 1.25 miles of the measurement location (the distance within which aircraft are audible).
- Of these, 3,491 were touch and go (T&G) operations (46%).
- Over the entire month, aircraft operations were clearly noticeable (aircraft noise measured at approximately 5 dBA above the ambient sound level) for 4,801 minutes (80 hours).
- If T&G operations were not conducted at the airport, an analysis of the measurement data indicates that noticeable aircraft operations would decrease to 2,195 minutes (37 hours), which is a 54% reduction.
- The following summarizes the April 2026 noise survey results at the Water Bladder.

Table 1 - Summary of Daytime Measured Noise Levels and Aircraft Operations, April 2026 (Water Bladder)

Operations	Quantity	Audible Aircraft Operations	Aircraft Noise Above Ambient (dBA)	Aircraft 5 dBA Above Ambient (minutes)	Aircraft 10 dBA Above Ambient (minutes)	Aircraft 20 dBA Above Ambient (minutes)
All	Total for month	7,582	---	4,801	3,235	620
	Daily average	253	18	192	129	25
Touch and Go Removed	Total for month	4,787	---	2,195	1,389	199
	Daily average	160	14	88	56	8

- Figure 1 shows the flight paths on April 30, a day with total operations close to the median for the month. Note the concentration of T&G operations over the Town of Superior and Boulder County.
- Figure 2 shows the measured noise levels and concurrent aircraft activity for this day. Maximum noise levels generated by individual aircraft operations exceeded the ambient sound level by at least the following levels for the durations noted:
  - 5 dBA (clearly noticeable), 229 minutes.
  - 10 dBA (significant increase), 167 minutes.
  - 20 dBA (much louder), 37 minutes.
- Table 2 shows the hourly average noise levels and operation counts for this day.
- Figure 3 shows an hour on this day, during which time the measured noise level was often above ambient conditions (40 dBA for this hour), meaning that aircraft noise was regularly present.
- Figure 4 shows the flight paths for the entire month of April 2026.

[1] This report counts each touch and go operation as a single operation. The Federal Aviation Administration counts each touch and go operation as two operations.

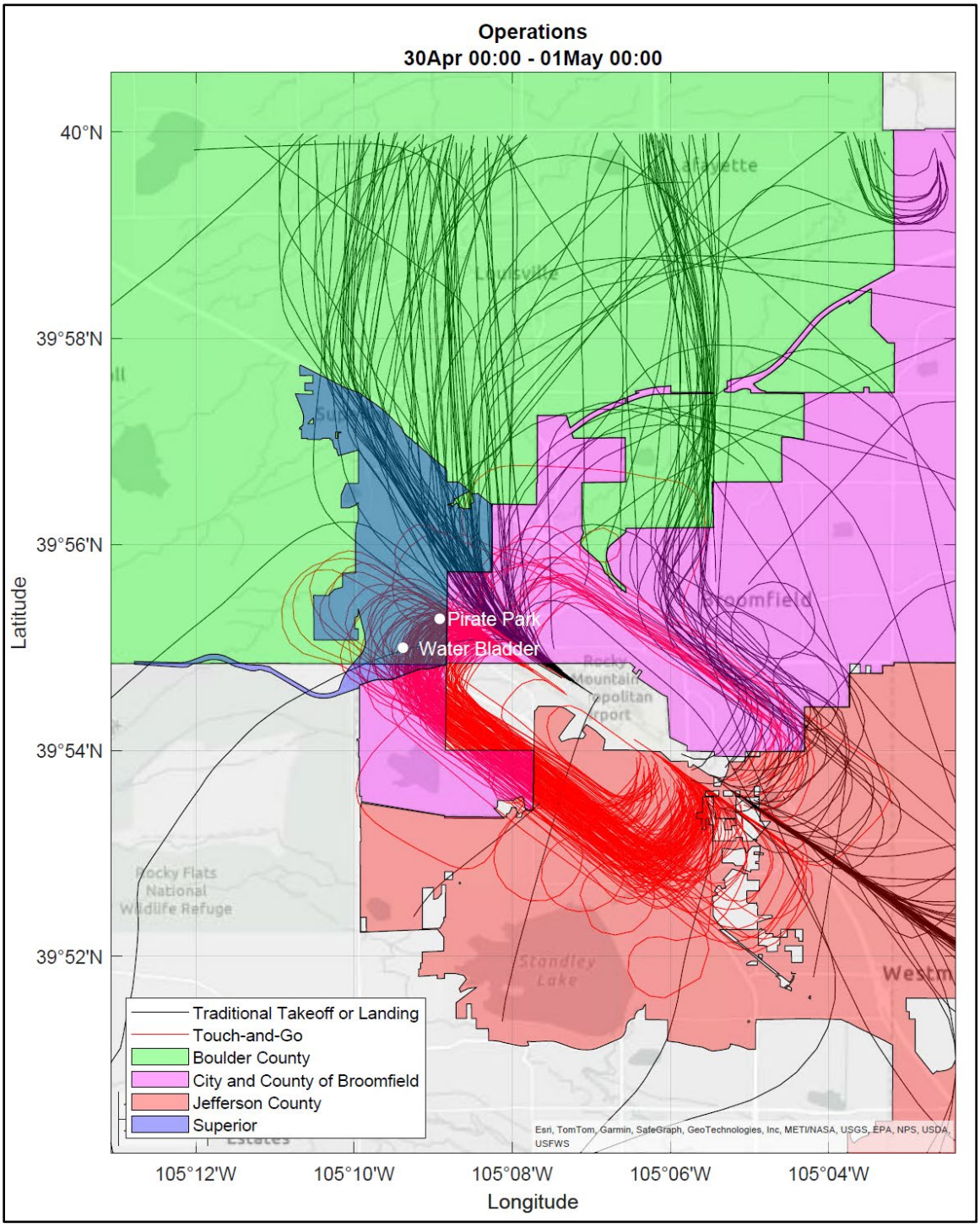

Figure 1 – Flight Paths on Median Day in April 2026 (388 Operations; 196 T&G)

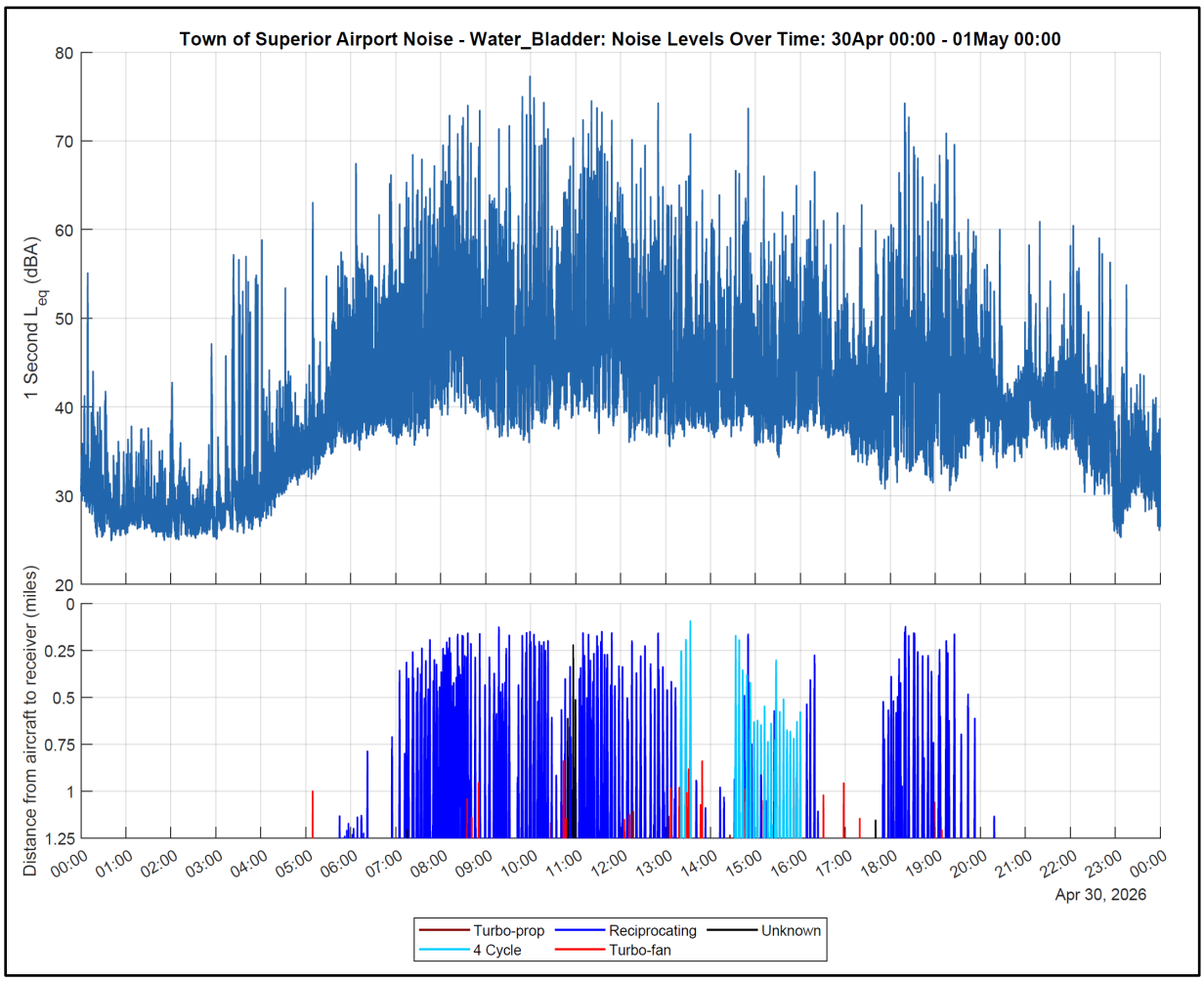

Figure 2 – Noise Levels and Aircraft Operations on Median Day (Water Bladder)

Table 2 – Hourly Noise Levels and Aircraft Operations on Median Day (Water Bladder)

Time	7 am	8 am	9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm
Average Noise Level (dBA)	51	55	55	53	54	54	53	50	54	55	53	53	49	45	48
Number of Operations	46	54	57	50	45	55	41	28	35	38	26	20	16	13	14

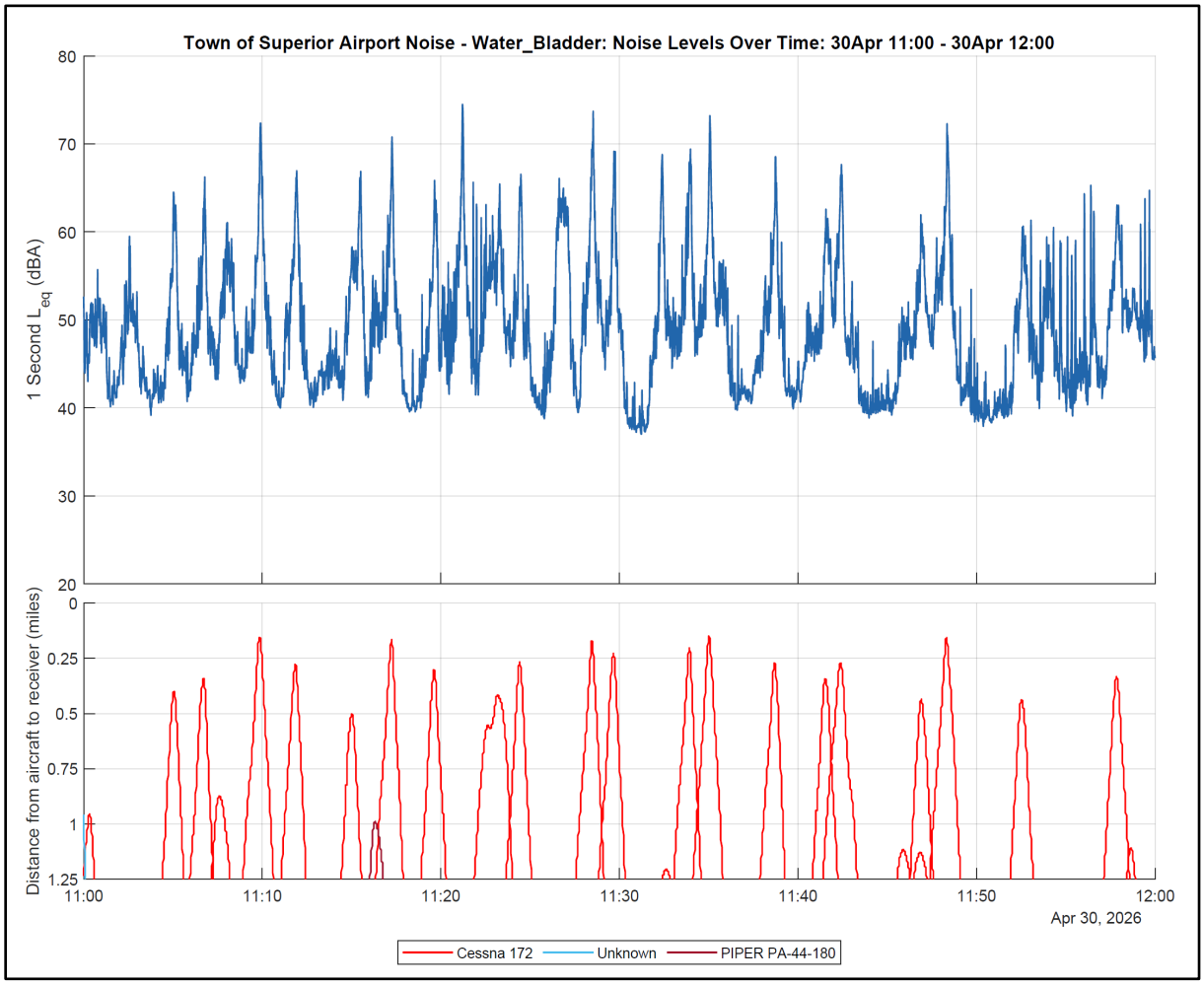

Figure 3 – Noise Levels and Aircraft Operations during an Example Hour on Median Day (Water Bladder)

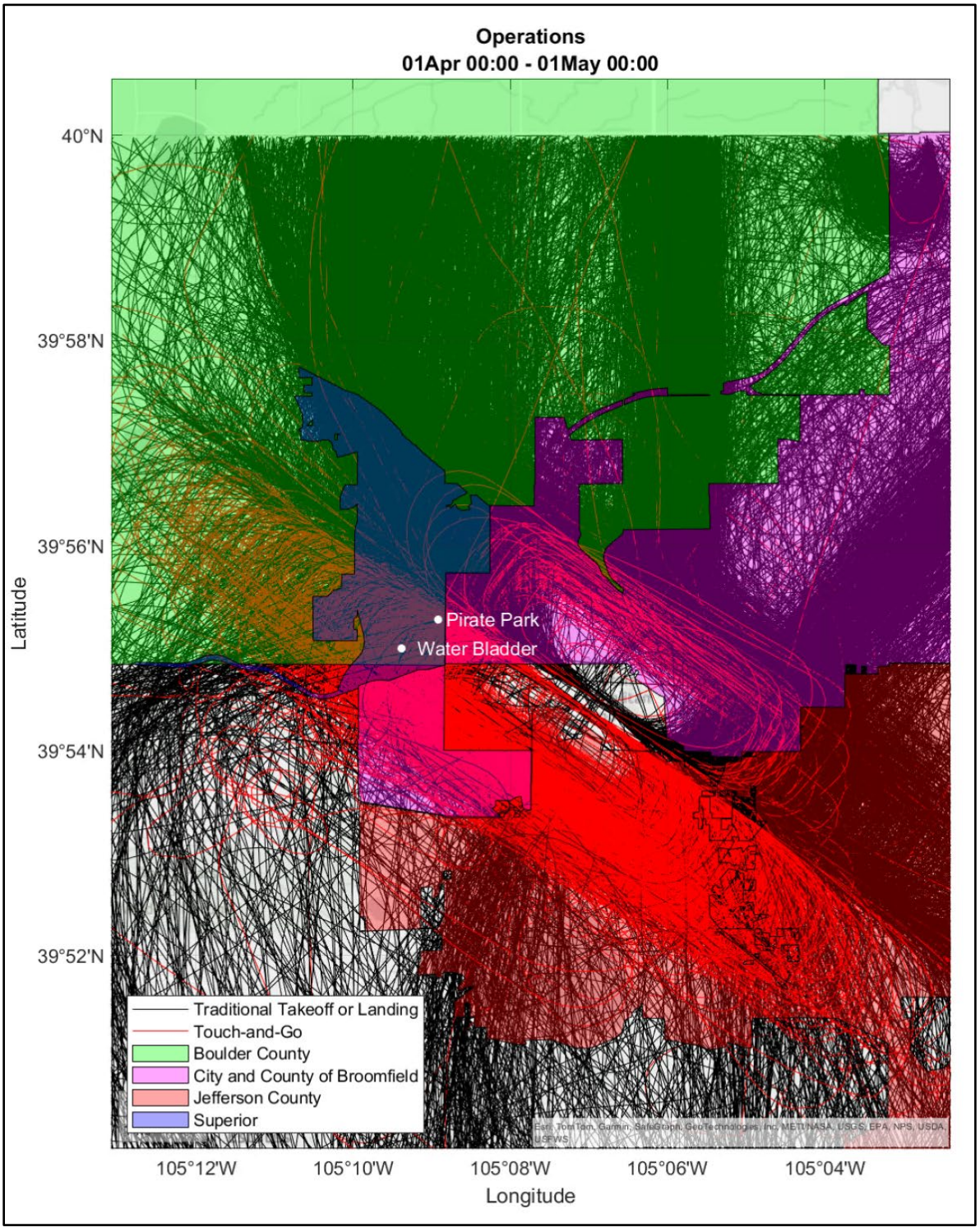

Figure 4 – All Flight Paths in April 2026 (12,619 Operations; 3,845 T&G)

Monthly Summary – April 2026 (Pirate Park Site)

The following summarizes the daytime noise levels measured at the Pirate Park measurement location located near Pirate Park off Yarrow Circle and aircraft operations detected over the Town of Superior for the month of April 2026. Additional information regarding the measurements follows.

- Over the entire month, a total of 8,046 aircraft operations[2] occurred within 1.25 miles of the measurement location (the distance within which aircraft are audible).
- Of these, 3,573 were touch and go (T&G) operations (44%).
- Over the entire month, aircraft operations were clearly noticeable (aircraft noise measured at approximately 5 dBA above the ambient sound level) for 4,439 minutes (74 hours).
- If T&G operations were not conducted at the airport, an analysis of the measurement data indicates that noticeable aircraft operations would decrease to 2,533 minutes (42 hours), which is a 43% reduction.
- The following summarizes the April 2026 noise survey at Pirate Park. Note the daily average minutes that aircraft noise was 20 dBA above ambient is much higher than at the Water Bladder site due to the closer proximity to the runway and the lower, climbing aircraft.

Table 3 - Daytime Measured Noise Levels and Aircraft Operations, April 2026 (Pirate Park)

Operations	Quantity	Audible aircraft operations	Aircraft noise above ambient (dBA)	Aircraft 5 dBA Above Ambient (minutes)	Aircraft 10 dBA Above Ambient (minutes)	Aircraft 20 dBA Above Ambient (minutes)
All	Total for month	8,046	---	4,439	3,109	871
	Daily average	268	20	222	155	44
Touch and Go Removed	Total for month	5,210	---	2,533	1,778	426
	Daily average	174	17	127	89	21

- Figure 5 shows the measured noise levels and concurrent aircraft activity for April 30, a day with total operations close to the median for the month. Maximum noise levels generated by individual aircraft operations exceeded the ambient sound level by at least the following levels for the durations noted:
  - 5 dBA (clearly noticeable), 258 minutes.
  - 10 dBA (significant increase), 195 minutes.
  - 20 dBA (much louder), 72 minutes.
- Table 4 shows the hourly average noise levels and operation counts for this day.
- Figure 6 shows an hour on this day, during which time the measured noise level was often above ambient conditions (41 dBA for this hour), meaning that aircraft noise was regularly present.

[2] This report counts each touch and go operation as a single operation. The Federal Aviation Administration counts each touch and go operation as two operations.

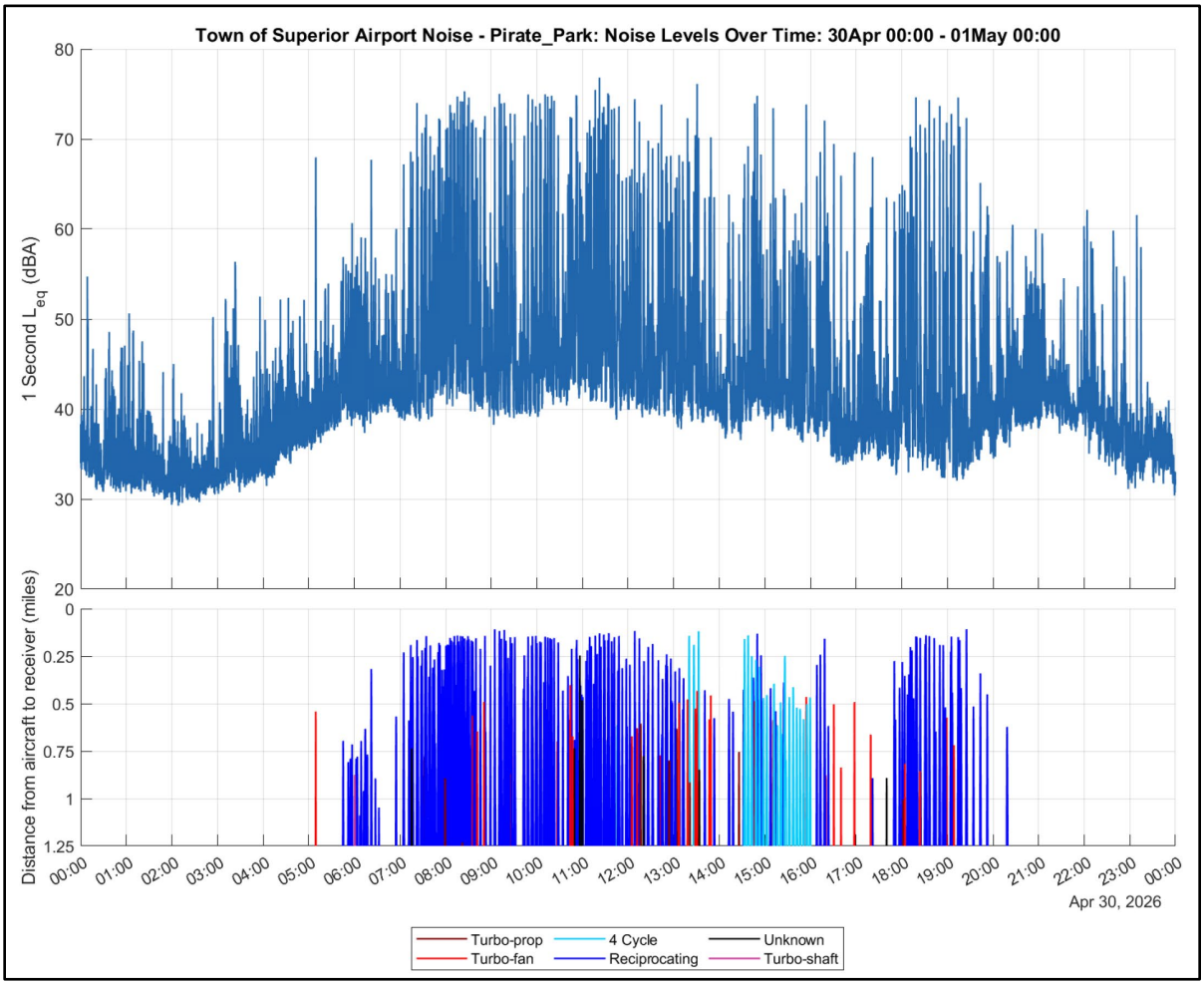

Figure 5 – Noise Levels and Aircraft Operations on Median Day (Pirate Park)

Table 4 – Hourly Noise Levels and Aircraft Operations on Median Day (Pirate Park)

Time	7 am	8 am	9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm
Average Noise Level (dBA)	60	59	56	57	57	52	56	58	57	54	51	46	51	60	59
Number of Operations	46	54	57	50	45	55	41	28	35	38	26	20	16	13	14

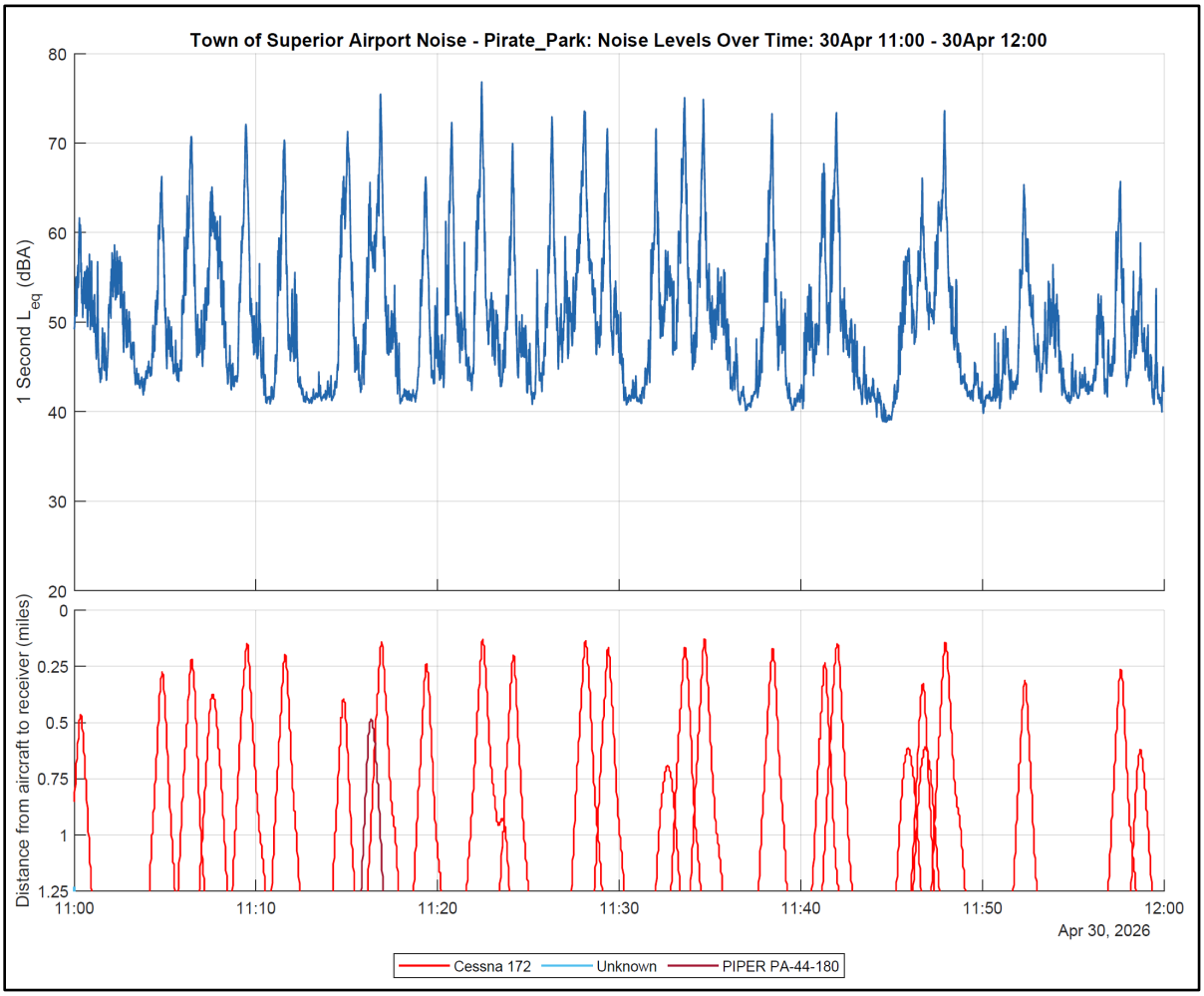

Figure 6 – Noise Levels and Aircraft Operations during an Example Hour on Median Day (Pirate Park)

Detailed Results

1. Measurement Locations and Flight Paths

Noise level monitors were placed at the locations shown in Figure 1-1 and configured to continually measure noise levels. The meters were in service for the entirety of April 2026. The selection of measurement locations considered proximity of Town of Superior residences, aircraft flight paths, and availability of public land. The Water Bladder location was chosen as it is removed from busy roads and in the flight path of touch and go operations. The Community Center location was chosen as it is directly in the flight path of runway 12 L. The Pirate Park location was chosen as it is directly in the flight path of runway 12 R while still being nearby to residences.

Aircraft flight paths are limited due to Denver International Airport airspace to the east and mountains to the west. This, along with prevailing wind patterns, pushes a majority of operations over the Town of Superior, as shown in Figures 1 and 4 (above).

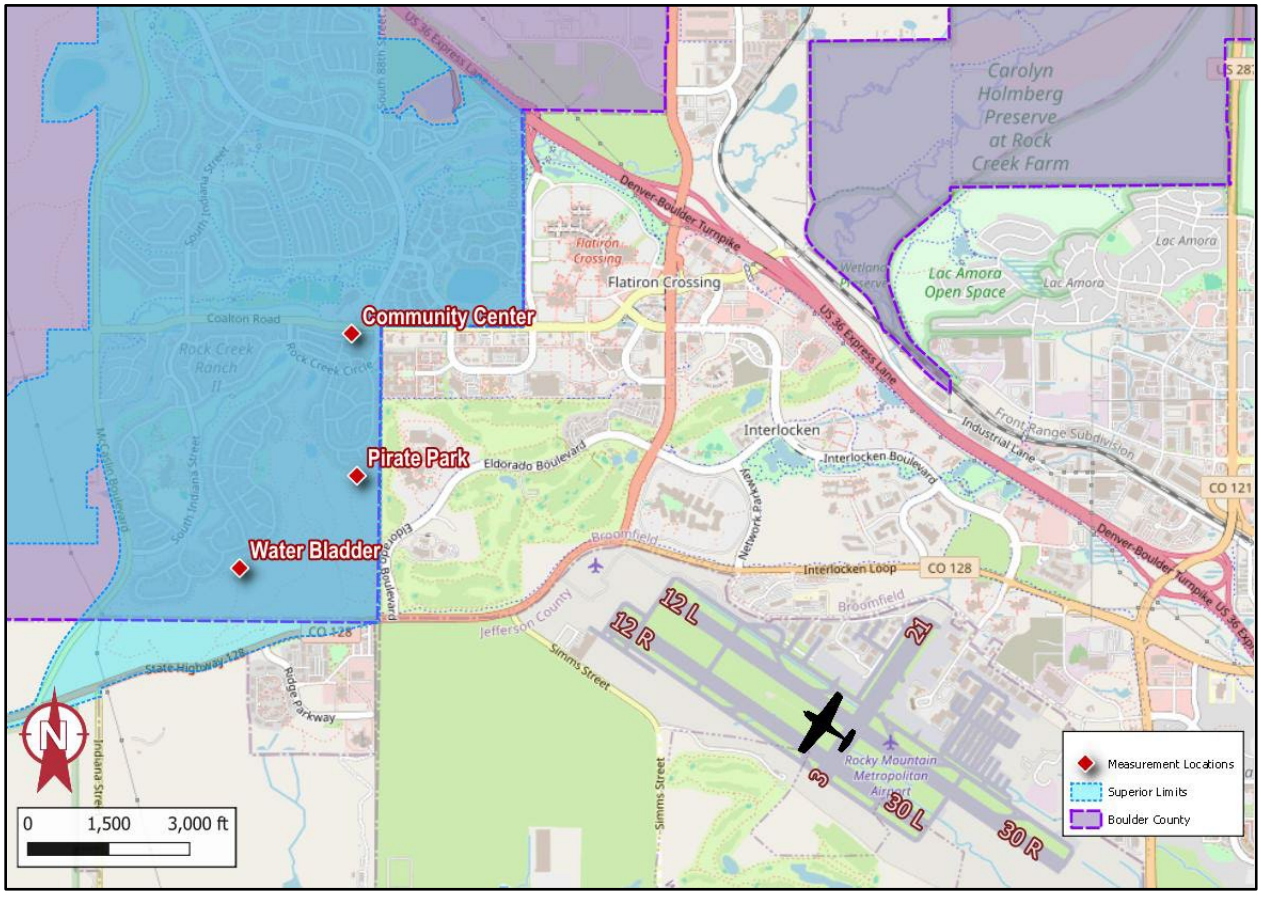

Figure 1-1. Measurement Locations and Airport

2. Noise and Aircraft Operations Measurement Procedures

Noise levels were measured in accordance with applicable acoustical standards as well as the author's experience in this specialized field. The following sections describe the acoustical standards followed, measurement equipment specifications and settings, measurement duration, ground wind measurement equipment, and aircraft operations data integration.

2.1 Applicable Noise Measurement and Analysis Standards

The measurements were executed in accordance with the relevant aspects of the following standards:

1. Noise measurement equipment meets the Type 1 specifications of American National Standards Institute (ANSI) standard S1.4-2014 (R2024) American National Standard Specification for Sound Level Meters.
2. ANSI S1.11-2004 (R2009), Electroacoustics - Octave-band and Fractional-octave-band Filters - Part 1: Specifications.
3. ANSI S1.40-2006 (R2016), American National Standard Specifications and Verification Procedures for Sound Calibrators.
4. The measurement and analysis procedures followed the applicable portions of ANSI S12.9-2013 Part 3 (R2018) Quantities and Procedures for Description and Measurement of Environmental Sound - Part 3: Short-Term Measurements with an Observer Present.
5. ANSI S12.18-1994 (R2019) Outdoor Measurement of Sound Pressure Level.
6. ANSI S1.13-2020 American National Standard Measurement of Sound Pressure Level in Air.

2.2 Noise Measurement Equipment

Noise levels were measured using Larson Davis Model 831 sound level meters with associated preamplifiers and ½ inch free-field precision microphones. All measurement and field calibration equipment were certified by a traceable laboratory within 18 months prior to the measurements. Field calibrations were conducted on April 2, 2026 for all sites and the drift in the measured noise level was well within tolerance (Water Bladder -0.53 dB, Pirate Park -0.58 dB, and Community Center +0.11 dB). Calibration certificates and records are available upon request.

The microphones were mounted on steel poles and positioned five feet above the ground (per ANSI S12.9). The microphones were covered with hydrophobically treated 7-inch diameter, 80-pores-per-inch density windscreens (ACO Pacific Model WS7-80T). Audio from each sound level meter was recorded using Tascam DR-05X digital recorders. The sound level meters were configured to continuously measure and record 1-second and 1-hour averages of the following metrics: overall L_{eq}, L_{10}, L_{50}, and L_{90}, as well as one-third octave band L_{eq} levels (6.3 Hz to 20 kHz).

2.3 Aircraft Position Measurement Equipment

Aircraft position data is being collected in the area with an Automatic Dependent Surveillance-Broadcast (ADS-B) monitoring system that receives real-time data from each aircraft in the area, including location, speed, and a unique identifier (hex code). Aircraft position data is being logged on 1-second intervals and is combined with the Federal Aviation Administration (FAA) aircraft registration database to get additional information for each aircraft, including make/model, engine type, and owner. Aircraft from flight schools were identified based on the owner and listed registration numbers from the flight school websites. Altitude data from the aircraft is based on barometric pressure on the aircraft and is not corrected for barometric pressure on the ground. During data processing, the altitude data is corrected based on barometric pressure from the airport. Aircraft above 11,000 feet are filtered out of the database to eliminate from the analysis aircraft that are merely passing overhead and not using Rocky Mountain Metropolitan Airport.

2.4 Meteorological Data

Wind speeds and direction are being measured continuously at each monitoring site using Vaisala WXT530 series sonic anemometers, mounted on steel poles approximately 6.5 feet above the ground (per ANSI S12.18) and placed within approximately 10 feet of the microphones. Barometric pressure data was obtained from the airport's weather station.

2.5 Resulting Measurement Database

This report presents the results of measurements conducted throughout the month of April 2026. A total of 720 hours of continuous noise, aircraft, and ground wind data were collected. All data was organized into a single database and time synchronized through the cellular network.

Figure 2-1 shows noise levels versus time (top graph) and distance to the nearest aircraft over time (bottom graph) for an example one-hour period at Pirate Park. This example shows a Piper PA-44-180 (shown in purple) performing touch and go operations, which involves landing and immediately taking off again, and results in the airplane passing over the microphone every few minutes. Four other aircraft (shown in orange, yellow, blue, and green) perform traditional takeoffs or landings. Note the ambient sound level, the level occurring with no aircraft present, is approximately 40 dBA during this example hour. With aircraft present, levels are as high as 80 dBA, which is a 40 dBA increase over the ambient sound level.

Figure 2-2 shows the measured noise levels and aircraft operations for a representative hour with frequent aircraft operations. During this hour the ambient sound level for this day of 40 dBA is rarely reached because there was very little time when aircraft noise was not audible.

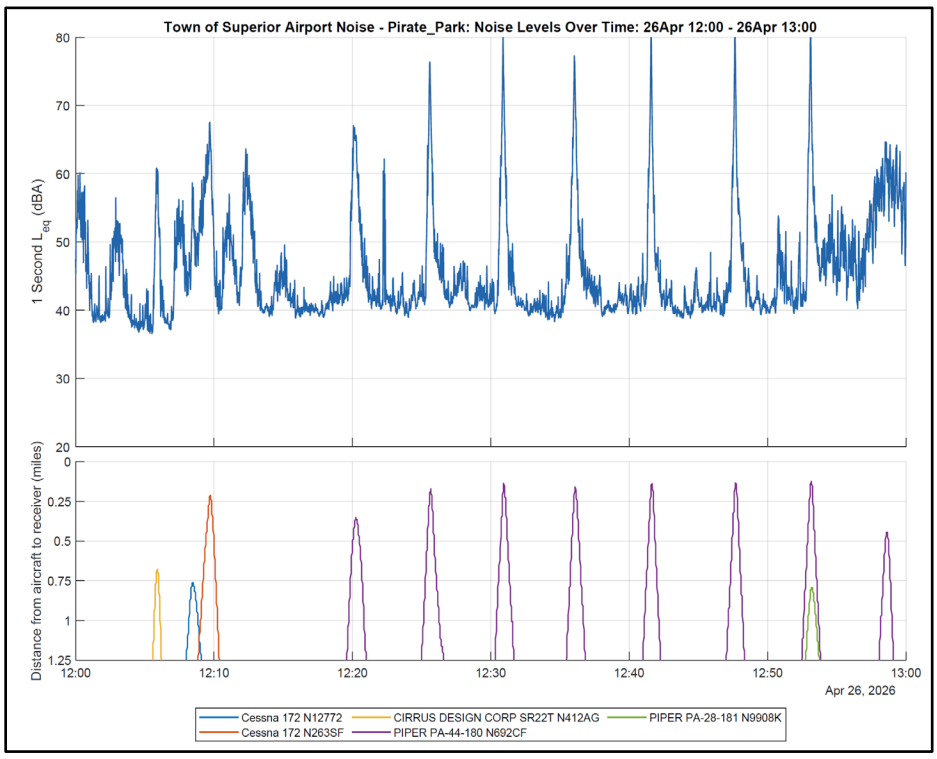

Figure 2-1. Example Time Plot of Measured Noise Levels - Touch and Go Operations

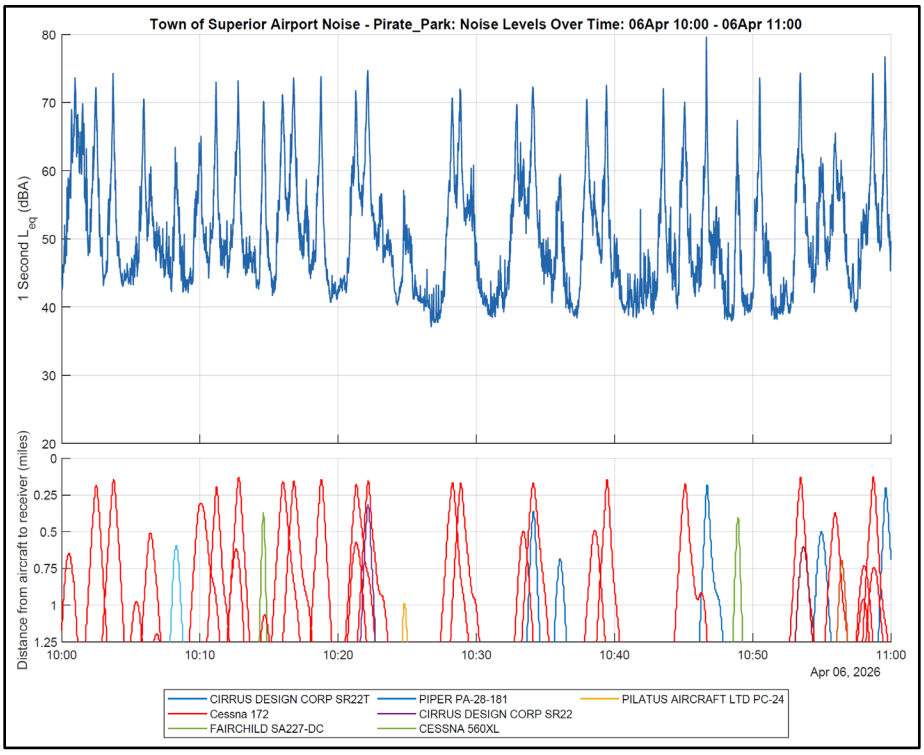

Figure 2-2. Example Time Plot During an Hour with Frequent Aircraft Operations

3. Data Analysis Procedures

The measured noise level and aircraft operations data were analyzed as follows.

3.1 Duration of Analysis Intervals

The measured data was recorded and analyzed in 1-second intervals. This interval was chosen because it provides sufficient resolution to capture changes in noise levels against aircraft proximity over time and follows the FAA's procedures. Results are summarized and presented herein in terms of daily averages of noise levels when aircraft are present versus ambient noise levels in the area (noise generated by non-aircraft sources, such as distant roadway traffic).

3.2 Aircraft Types and Operations

Each 1-second ADS-B sample was classified into one of five operational types: (1) on-the-ground, (2) flyover, (3) touch and go (T&G), (4) takeoff, and (5) landing. The number of operations per day for each operational type is shown in Table 3-1. Samples classified as on-the-ground were excluded from further analysis as planes would not be audible during these times, and samples for aircraft above 11,000 feet or classified as flyovers were excluded from further analysis as these operations were not generated by this airport.

Each aircraft detected in the month is analyzed separately. Each 1-second sample in which the individual aircraft's signal was detected is arranged into a table in chronological order. Each sample is labeled as on the ground (known from the positional information) or airborne. Airborne samples are then grouped into events, which include takeoff, landing, touch and go operation, and flyover. Starting with the first 1-second sample in time where the aircraft was detected as being airborne, the following logic is applied. This is also shown in the table below.

- If the previous sample was on the ground, and a sample within the next 20 minutes is on the ground, the entire window of samples when the aircraft was airborne is classified as touch and go.
- If the previous sample was on the ground, and no samples within the next 20 minutes are on the ground, the entire 20-minute window of samples is classified as takeoff.
- If the previous sample was not on the ground, and a sample within the next 20 minutes is on the ground, the entire window of samples when the aircraft was airborne is classified as landing.
- If the previous sample was not on the ground, and no samples within the next 20 minutes are on the ground, the entire 20-minute window of samples is classified as a flyover and is disregarded from further analysis.

	Is on the ground within the next 20 minutes	**Is not on the ground within the next 20 minutes**
Previous sample was on the ground	Touch and Go	Takeoff
Previous sample was not on the ground	Landing	Flyover

Additionally, T&G operations were further classified as initial (the initial takeoff) or subsequent (subsequent touch and go landings and takeoffs) depending on whether the previous operation of the aircraft was classified as a T&G operation. As described in more detail below, this was done to allow for the estimation of noise levels for a scenario where T&G operations occurred at another distant airfield.

Each ADS-B sample was also classified by aircraft engine type, as shown in Table 3-2. Aircraft engine type is identified from the aircraft registration "N Number" broadcast by the aircraft, and the FAA aircraft registration database, which provides details about each registered aircraft. Flight schools are identified based on the aircraft registered owner, a list of planes and N Numbers on each flight school's website, and observations of aircraft at the airport. Most aircraft are identified as piston engine (reciprocating or 4-cycle) and a majority of them are registered to flight schools.

3.3 Ambient Sound Levels

For the purposes of this analysis, the ambient daytime noise levels for each day are defined as the L_{90} dBA noise level measured during daytime hours. This is calculated by ordering all 1-second L_{eq} dBA noise level samples measured between 7:00 AM and 10:00 PM and determining the 90^{th} percentile, which is the noise level exceeded 90 percent of the time. Noise level contributions from aircraft operations are effectively removed with the L_{90} metric.

3.4 Aircraft Noise Levels

Aircraft noise levels represent the 1-second measurement samples when any aircraft operations were audible. Noise levels are plotted against the concurrently measured distance from each aircraft to quantify the relationship between these two variables. The data indicates that at distances of 1 to 1.25 miles, aircraft begin to have an effect on noise levels and, at distances of 1 mile or less from the measurement location, aircraft have a significant influence on measured noise levels. For the purposes of this analysis operations were considered audible if the aircraft came within 1.25 miles of a measurement site at any time during the operation.

3.5 Aircraft Noise Levels without T&G Operations

Aircraft noise levels without T&G operations represent the average of all 1-second samples taken when aircraft operations were audible, but with noise levels during all times when an aircraft operation was classified as a subsequent T&G set to the ambient sound level for that day. This simulates what the average noise level would have been if T&G operations took place elsewhere, i.e., a distant airfield. Initial T&G operations were not removed from the analysis because an aircraft would need to take off and land at the airport even if T&G operations were located elsewhere. This initial T&G operation represents the takeoff and landing.

Table 3-1. Aircraft Operations by Type[3]

Day	Operation Type			Total Operations	Percentage T&G	Total Number of Unique Aircraft
	T&G	Takeoff	Landing			
1-Apr-26	46	144	145	335	14%	115
2-Apr-26	102	192	187	481	21%	132
3-Apr-26	13	43	37	93	14%	53
4-Apr-26	154	178	179	511	30%	118
5-Apr-26	91	124	128	343	27%	95
6-Apr-26	182	248	249	679	27%	149
7-Apr-26	179	229	220	628	29%	140
8-Apr-26	109	171	170	450	24%	119
9-Apr-26	51	174	171	396	13%	125
10-Apr-26	194	175	170	539	36%	127
11-Apr-26	89	119	121	329	27%	97
12-Apr-26	199	138	141	478	42%	115
13-Apr-26	190	186	185	561	34%	138
14-Apr-26	151	93	93	337	45%	95
15-Apr-26	99	153	149	401	25%	118
16-Apr-26	144	217	223	584	25%	152
17-Apr-26	15	26	25	66	23%	41
18-Apr-26	53	166	165	384	14%	111
19-Apr-26	154	184	183	521	30%	126
20-Apr-26	189	217	211	617	31%	130
21-Apr-26	205	230	226	661	31%	133
22-Apr-26	162	136	138	436	37%	110
23-Apr-26	93	70	71	234	40%	81
24-Apr-26	110	158	157	425	26%	120
25-Apr-26	178	123	124	425	42%	96
26-Apr-26	19	29	35	83	23%	45
27-Apr-26	158	70	75	303	52%	89
28-Apr-26	114	122	118	354	32%	100
29-Apr-26	206	182	189	577	36%	152
30-Apr-26	196	93	99	388	51%	106
Month Total	3,845	4,390	4,384	12,619	30%	-

[3] This report counts each touch and go operation as a single operation. The Federal Aviation Administration counts each touch and go operation as two operations.

Table 3-2. Aircraft Operations by Aircraft Engine Type[4]

	Engine Type					
Day	Piston	Turboprop	Turboshaft	Turbojet	Turbofan	Unknown
1-Apr-26	270	8	12	0	39	6
2-Apr-26	402	18	14	0	39	8
3-Apr-26	35	15	7	0	34	2
4-Apr-26	480	4	0	0	24	3
5-Apr-26	306	8	8	0	18	3
6-Apr-26	604	23	10	0	39	3
7-Apr-26	547	26	13	0	42	0
8-Apr-26	380	17	9	0	33	11
9-Apr-26	300	11	20	0	57	8
10-Apr-26	475	9	8	1	37	9
11-Apr-26	290	7	0	2	25	5
12-Apr-26	434	6	4	0	30	4
13-Apr-26	467	25	16	0	46	7
14-Apr-26	264	16	17	0	35	5
15-Apr-26	333	14	4	0	45	5
16-Apr-26	500	18	5	0	54	7
17-Apr-26	15	11	2	0	34	4
18-Apr-26	344	7	3	0	30	0
19-Apr-26	466	16	2	0	34	3
20-Apr-26	551	13	19	0	34	0
21-Apr-26	595	16	9	0	39	2
22-Apr-26	367	18	10	0	33	8
23-Apr-26	172	17	2	0	42	1
24-Apr-26	365	14	7	0	31	8
25-Apr-26	397	7	4	0	13	4
26-Apr-26	41	9	0	0	31	2
27-Apr-26	236	22	4	0	38	3
28-Apr-26	296	16	4	0	37	1
29-Apr-26	483	19	22	0	45	8
30-Apr-26	281	19	7	0	74	7
Month Total	10,696	429	242	3	1,112	137

[4] This report counts each touch and go operation as a single operation. The Federal Aviation Administration counts each touch and go operation as two operations.

4. Noise Measurement and Analysis Results

Tables 4-1 through 4-3 provide a summary of the noise levels and aircraft operations measured during each day of April 2026 at each of the three measurement locations. The tables provide the following information:

- The daily measured ambient (background) sound level (L_{90}).
- The number of audible aircraft operations each day. For the purposes of this analysis operations were considered audible if aircraft came within 1.25 miles of a measurement site, based on an analysis of measured noise level and aircraft distance data. This will exclude any takeoffs and landings from and to runways 30 L and 30 R.
- The average measured noise level with aircraft from the airport present (within 1.25 miles).
- The number of decibels that aircraft noise is above the daily ambient sound level.
- The number of minutes each day that aircraft were present, and the noise level they generated that exceeded the ambient sound level by at least 5, 10, and 20 dBA, respectively.
- This information is then repeated with T&G operations excluded from the analysis.

Table 4-1. Summary of Measured Noise Levels[5] and Aircraft Operations[6] – Water Bladder

Date	Ambient Noise Level (dBA)	Daytime - All Operations						Daytime - T&G Operation Removed					
		Number of Audible Operations	Average Noise Level with Aircraft (dBA)	Aircraft Noise Level Increase Above Ambient (dBA)	Duration of Aircraft Noise Levels			Number of Audible Operations	Average Noise Level with Aircraft (dBA)	Aircraft Noise Level Increase Above Ambient (dBA)	Duration of Aircraft Noise Levels		
					> 5 dBA	> 10 dBA	> 20 dBA				> 5dBA	> 10 dBA	> 20 dBA
1-Apr-26	37	165	55	17	122	81	11	136	51	14	84	54	4
2-Apr-26	36	303	53	17	219	136	20	236	49	13	144	86	9
3-Apr-26	-	30	-	-	-	-	-	22	-	-	-	-	-
4-Apr-26	35	327	51	16	231	121	17	218	49	14	120	61	8
5-Apr-26	33	216	50	17	85	52	10	150	48	16	46	29	6
6-Apr-26	-	401	-	-	-	-	-	267	-	-	-	-	-
7-Apr-26	36	377	55	20	252	199	44	250	50	14	121	90	15
8-Apr-26	38	250	55	17	196	131	21	176	51	14	102	63	8
9-Apr-26	38	193	53	15	97	58	6	169	51	12	83	47	3
10-Apr-26	39	340	58	19	290	208	39	191	53	14	110	77	12
11-Apr-26	37	208	55	18	160	104	22	143	50	13	81	48	7
12-Apr-26	33	330	53	20	280	186	41	172	46	13	91	57	8
13-Apr-26	35	323	55	20	243	173	36	178	50	15	99	67	11
14-Apr-26	38	214	55	18	176	120	19	106	48	11	54	33	4
15-Apr-26	40	185	56	15	89	51	7	116	53	12	50	27	3
16-Apr-26	35	331	55	20	263	189	48	237	51	16	125	77	14
17-Apr-26	-	30	-	-	-	-	-	18	-	-	-	-	-
18-Apr-26	33	193	53	20	131	91	20	172	52	19	115	78	16
19-Apr-26	-	343	-	-	-	-	-	232	-	-	-	-	-
20-Apr-26	34	381	54	20	281	209	39	236	48	14	121	84	10
21-Apr-26	36	430	53	17	222	137	21	270	48	13	100	60	8
22-Apr-26	-	276	-	-	-	-	-	170	-	-	-	-	-
23-Apr-26	37	132	54	17	106	68	11	61	49	13	32	20	4
24-Apr-26	35	245	54	19	176	104	22	170	52	16	102	54	9
25-Apr-26	36	295	55	19	264	184	40	163	49	14	104	71	13
26-Apr-26	34	43	58	24	36	31	10	27	48	14	14	12	2
27-Apr-26	35	222	56	21	194	130	33	94	49	14	57	41	8
28-Apr-26	38	226	56	18	203	133	22	137	51	13	82	51	7
29-Apr-26	40	321	57	17	255	171	25	177	51	12	109	70	6
30-Apr-26	38	252	57	19	229	167	37	93	48	10	49	34	4
Monthly Average	**36**	**253**	**55**	**18**	**192**	**129**	**25**	**160**	**50**	**14**	**88**	**56**	**8**
Monthly Total	**-**	**7,582**	**-**	**-**	**4,801**	**3,235**	**620**	**4,787**	**-**	**-**	**2,195**	**1,389**	**199**

[5] No usable noise data April 3 or 17 due to high wind and April 6, 19, and 22 due to data corruption.

[6] This report counts each touch and go operation as a single operation. The Federal Aviation Administration counts each touch-and-go operation as two operations.

Table 4-2. Summary of Measured Noise Levels[7] and Aircraft Operations[8] – Community Center

Date	Ambient Noise Level (dBA)	Daytime - All Operations						Daytime - T&G Operation Removed					
		Number of Audible Operations	Average Noise Level with Aircraft (dBA)	Aircraft Noise Level Increase Above Ambient (dBA)	Duration of Aircraft Noise Levels			Number of Audible Operations	Average Noise Level with Aircraft (dBA)	Aircraft Noise Level Increase Above Ambient (dBA)	Duration of Aircraft Noise Levels		
					> 5 dBA	> 10 dBA	> 20 dBA				> 5dBA	> 10 dBA	> 20 dBA
1-Apr-26	45	179	60	15	148	86	12	150	60	15	129	80	12
2-Apr-26	43	308	60	16	207	121	31	241	59	16	172	105	29
3-Apr-26	42	49	56	14	26	12	1	41	56	14	23	12	1
4-Apr-26	43	336	54	11	154	47	5	227	54	11	115	38	5
5-Apr-26	41	224	56	15	137	71	14	157	56	15	110	61	13
6-Apr-26	45	423	64	19	263	129	17	288	64	19	198	99	15
7-Apr-26	42	399	58	16	262	157	26	271	57	15	202	127	23
8-Apr-26	45	267	58	13	184	91	11	193	58	13	148	76	10
9-Apr-26	43	211	58	15	139	76	12	187	58	15	130	72	11
10-Apr-26	44	353	61	17	218	127	18	202	60	16	150	97	16
11-Apr-26	42	220	56	14	144	70	8	155	56	13	111	58	8
12-Apr-26	41	338	54	13	205	86	10	180	53	12	128	58	8
13-Apr-26	42	339	56	14	214	100	14	200	55	13	145	74	12
14-Apr-26	43	221	57	14	145	79	11	116	56	13	86	51	9
15-Apr-26	43	224	55	13	143	66	6	152	55	12	114	57	6
16-Apr-26	42	343	57	15	246	130	23	249	56	14	181	94	19
17-Apr-26	-	32	-	-	-	-	-	20	-	-	-	-	-
18-Apr-26	40	209	56	16	160	89	15	187	56	16	151	85	15
19-Apr-26	40	351	55	15	212	101	19	239	55	15	158	78	16
20-Apr-26	42	387	57	15	257	136	19	242	56	14	183	104	18
21-Apr-26	43	437	56	13	202	86	12	276	55	12	140	64	11
22-Apr-26	41	289	60	19	180	116	56	180	59	17	123	80	38
23-Apr-26	42	150	58	16	95	44	11	79	57	15	58	34	10
24-Apr-26	42	257	55	13	131	49	7	182	54	12	104	41	7
25-Apr-26	43	299	57	13	187	83	12	167	56	13	118	59	10
26-Apr-26	42	52	60	18	33	20	5	36	60	17	22	15	5
27-Apr-26	43	232	59	17	108	49	11	102	59	16	62	34	9
28-Apr-26	44	237	58	14	161	79	10	149	57	13	114	62	9
29-Apr-26	43	340	59	16	232	140	24	197	58	16	157	108	20
30-Apr-26	43	273	58	14	179	89	11	111	57	13	79	48	9
Monthly Average	**43**	**266**	**58**	**15**	**171**	**87**	**15**	**173**	**57**	**14**	**125**	**68**	**13**
Monthly Total	**-**	**7,979**	**-**	**-**	**4,972**	**2,527**	**430**	**5,176**	**-**	**-**	**3,612**	**1,971**	**376**

[7] No usable noise data from April 17 due to high wind.

[8] This report counts each touch and go operation as a single operation. The Federal Aviation Administration counts each touch-and-go operation as two operations.

Table 4-3. Summary of Measured Noise Levels[9] and Aircraft Operations[10] – Pirate Park

Date	Ambient Noise Level (dBA)	Daytime - All Operations						Daytime - T&G Operation Removed					
		Number of Audible Operations	Average Noise Level with Aircraft (dBA)	Aircraft Noise Level Increase Above Ambient (dBA)	Duration of Aircraft Noise Levels			Number of Audible Operations	Average Noise Level with Aircraft (dBA)	Aircraft Noise Level Increase Above Ambient (dBA)	Duration of Aircraft Noise Levels		
					> 5 dBA	> 10 dBA	> 20 dBA				> 5dBA	> 10 dBA	> 20 dBA
1-Apr-26	39	181	57	19	161	114	24	151	56	17	130	93	17
2-Apr-26	38	309	56	18	231	150	32	242	54	16	172	112	21
3-Apr-26	-	51	-	-	-	-	-	43	-	-	-	-	-
4-Apr-26	37	336	54	17	205	116	20	227	52	15	127	72	12
5-Apr-26	37	224	57	20	166	112	30	157	55	19	114	79	22
6-Apr-26	40	421	60	20	323	214	57	286	56	16	193	127	27
7-Apr-26	37	405	59	21	305	242	73	277	55	18	193	154	40
8-Apr-26	40	271	59	19	221	160	38	196	57	17	152	112	23
9-Apr-26	40	211	58	18	139	86	18	187	57	17	124	76	13
10-Apr-26	40	357	62	22	294	208	62	204	59	19	149	109	26
11-Apr-26	37	221	57	20	180	120	30	156	53	16	113	76	15
12-Apr-26	36	337	56	20	270	181	55	179	51	15	120	80	20
13-Apr-26	38	349	58	21	288	220	70	202	55	17	149	114	36
14-Apr-26	39	226	60	20	201	154	43	116	53	14	83	63	14
15-Apr-26	-	231	-	-	-	-	-	158	-	-	-	-	-
16-Apr-26	36	345	58	22	298	223	69	250	55	18	184	134	37
17-Apr-26	-	32	-	-	-	-	-	20	-	-	-	-	-
18-Apr-26	-	210	-	-	-	-	-	187	-	-	-	-	-
19-Apr-26	-	354	-	-	-	-	-	241	-	-	-	-	-
20-Apr-26	-	391	-	-	-	-	-	243	-	-	-	-	-
21-Apr-26	-	438	-	-	-	-	-	277	-	-	-	-	-
22-Apr-26	-	290	-	-	-	-	-	181	-	-	-	-	-
23-Apr-26	-	151	-	-	-	-	-	79	-	-	-	-	-
24-Apr-26	-	257	-	-	-	-	-	182	-	-	-	-	-
25-Apr-26	38	302	58	20	265	171	48	168	54	17	134	88	22
26-Apr-26	36	52	62	26	42	34	16	36	56	20	22	19	9
27-Apr-26	37	233	58	21	175	113	31	103	54	17	68	48	14
28-Apr-26	41	238	60	19	167	115	31	149	56	15	91	63	14
29-Apr-26	40	343	61	21	252	178	53	198	57	17	136	97	23
30-Apr-26	37	280	60	23	258	195	72	115	54	17	79	62	22
Monthly Average	**38**	**268**	**59**	**20**	**222**	**155**	**44**	**174**	**55**	**17**	**127**	**89**	**21**
Monthly Total	**-**	**8,046**	**-**	**-**	**4,439**	**3,109**	**871**	**5,210**	**-**	**-**	**2,533**	**1,778**	**426**

[9] No usable noise data from April 3, 15, 17, 18, 23, and 24 due to high wind and April 19-22 due to equipment malfunction.

[10] This report counts each touch and go operation as a single operation. The Federal Aviation Administration counts each touch-and-go operation as two operations.