



**SAN DIEGO**  
INTERNATIONAL AIRPORT

LET'S **GO.**

# Airport Noise Advisory Committee

February 20, 2019

## Agenda

1. Welcome and Introductions
2. Presentation Items
  - a. Quieter Home Program Update
  - b. Missed Approach Statistics
  - c. Early Turn & Other Flight Ops Statistics
  - d. Curfew Violation Review Panel Statistics
  - e. Fly Quiet Program Update
  - f. Airport Statistics
  - g. Noise Complaint Statistics
  - h. Update on ANAC Recommendations
  - i. Part 150 TAC Update
3. Public Comment
4. Action Items
  - a. Approval of December 19, 2018 Meeting Summary
5. Next Meeting: April 17, 2019
6. Adjourn



# Quieter Home Program Update

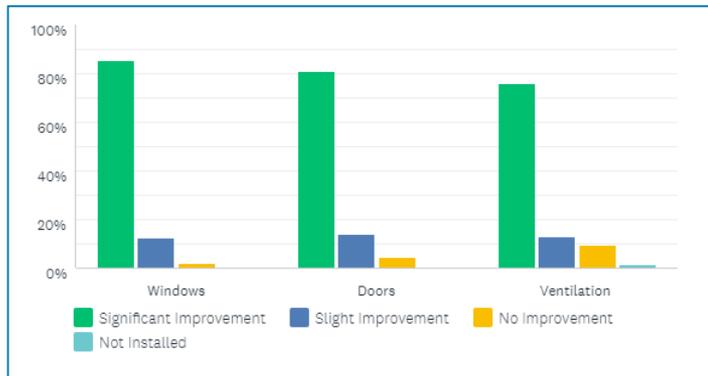


## IN THE LAST TWO MONTHS:

- Potentially-eligible 548-unit apartment complex has applied
- Began Phase 10 planning activities



How would you rate the EFFECTIVENESS of the changes made to your home?



## PROGRAM STATISTICS

|   |              |
|---|--------------|
| Applicants / Homes on the Wait List                     | 528/1,605    |
| Homes Completed in December & January                   | 34           |
| Estimated Homes to Complete in CY 2019                  | 300          |
| <b>Total Homes Completed (through January 31, 2019)</b> | <b>3,739</b> |

# QHP Questions ?



# Missed Approach Statistics

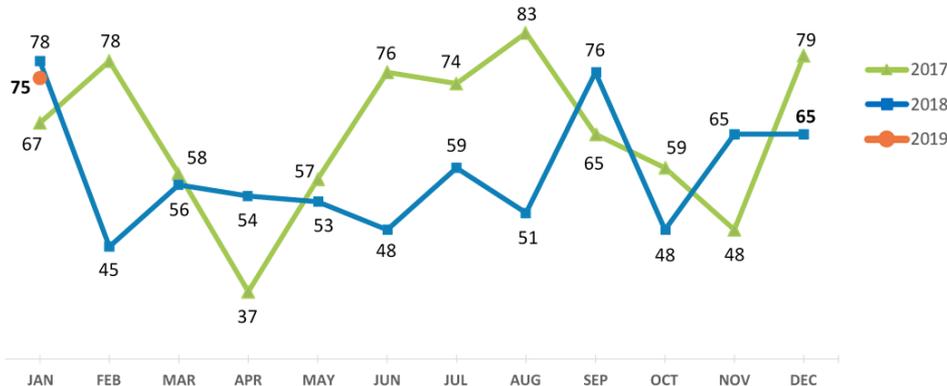
## IN THE LAST TWO MONTHS:

- 140 missed approaches
- 10% lower than last year (and CY17)
- Operations are up 7.4% (Year-to-Date)

## MISSED APPROACHES ARE CAUSED BY

- Unstable arrivals (too high to land)
- Traffic separation
- Poor visibility (Weather)
- Other safety concerns

### Missed Approaches by Month



### Missed Approaches by Year

| Year | Total Missed Approaches | % Change | Total Arrivals | % Change | % of Total Arrivals that are Missed Approaches |
|------|-------------------------|----------|----------------|----------|--|
| 2013 | 659                     | --       | 93,985         | --       | 0.7  |
| 2014 | 637                     | (3.3%)   | 95,881         | 2%       | 0.7  |
| 2015 | 748                     | 17.4%    | 96,856         | 1%       | 0.8  |
| 2016 | 771                     | 3.1%     | 98,566         | 1.8%     | 0.8  |
| 2017 | 781                     | 1.3%     | 104,725        | 6.2%     | 0.7  |
| 2018 | 698                     | (10.6%)  | 112,529        | 7.5%     | 0.6  |
| 2019 | 75*                     | --       | 9,120          | --       | 0.7  |

Source: FAA Data

# Missed Approach Statistics

## Missed Approaches by Location

All Missed Approaches are Safety-Related Operations

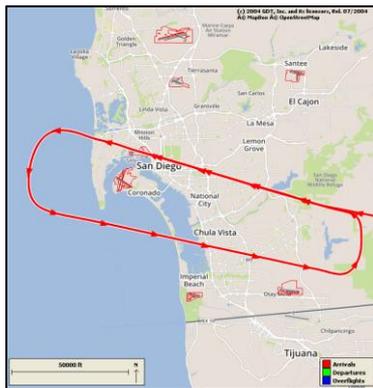
| Date          | Between 265 °- 295 ° Headings (Standard) | Left of 265 ° | Right of 295 ° | East of Airport | Day | Night |
|---------------|--|---------------|----------------|-----------------|-----|-------|
| December 2018 | 57                                       | 8             | 0              | 8               | 40  | 25    |
| January 2019  | 59                                       | 15            | 1              | 7               | 72  | 3     |

## Missed Approaches relative to the FAA Noise Dots

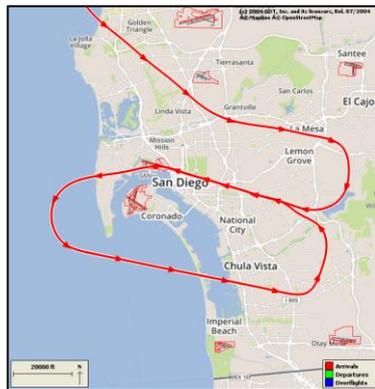
Missed Approaches may fly through more than one location

| Date          | Between ND #1 - ND #2 | Between ND #2 - JETTI | Between JETTI - ND #3 | Between ND #3 - ND #4 | Between ND #4 - ND #5 |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| December 2018 | 1                     | 29                    | 27                    | 8                     | 0                     |
| January 2019  | 4                     | 34                    | 22                    | 14                    | 1                     |

Standard Path



“ Early Turn” Path



# 94%

*Of Missed Approaches either follow the standard departure paths or occur east of the Airport*

# Early Turn Statistics

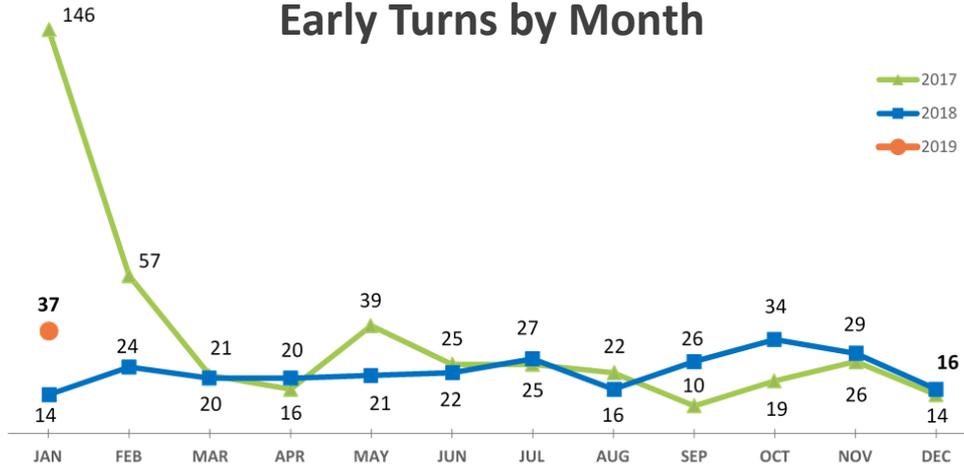
## IN THE LAST TWO MONTHS:

- 53 early turns
- 89% higher than last year
- Operations are up 7.4 % (Year-to-Date)

## WHY AN INCREASE?

- Significant Weather Events
- Traffic Separation
- 35 Flights that did not fly by ZZ000

### Early Turns by Month

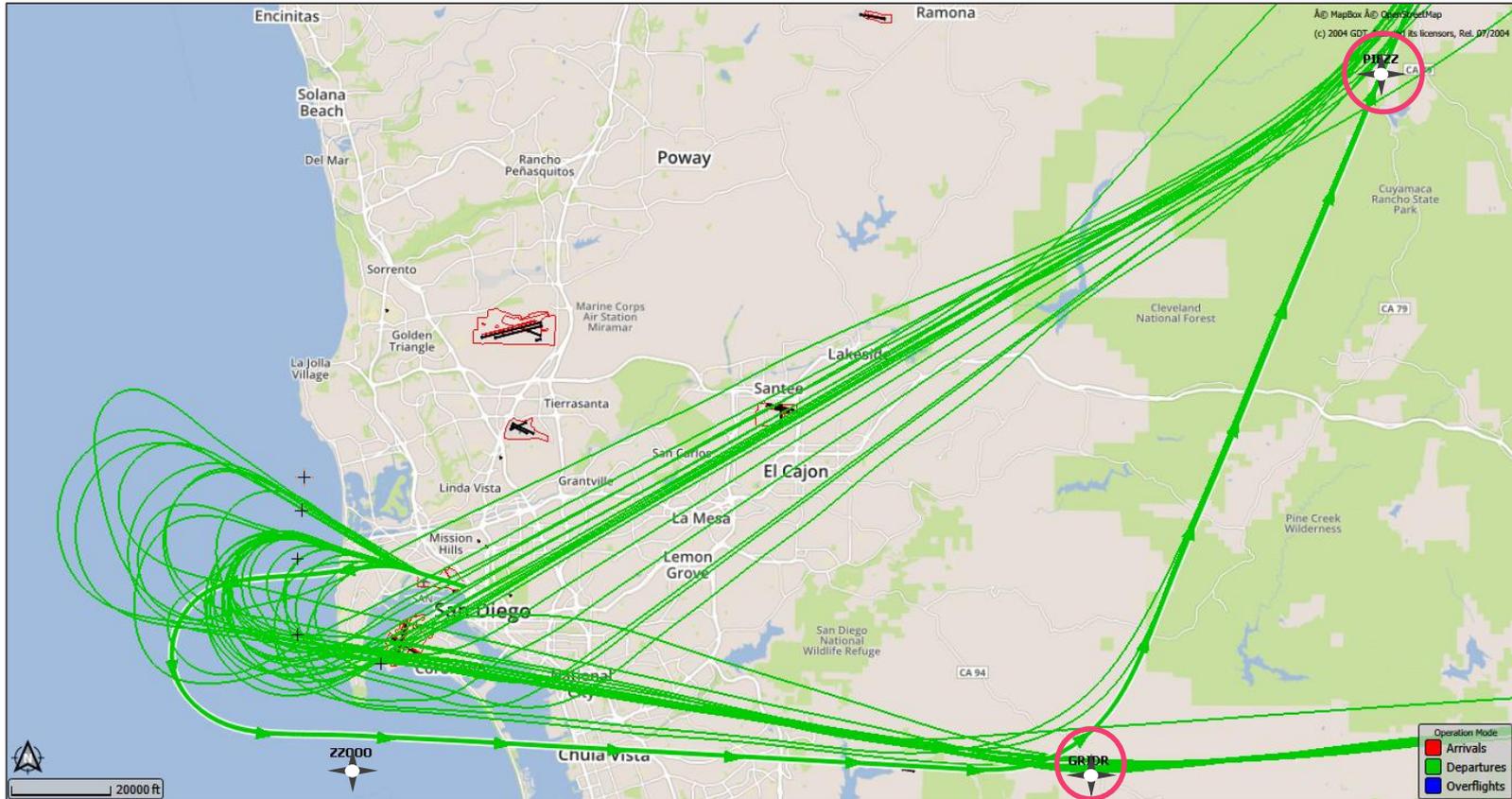


### Early Turns by Year

| YEAR | Early Turns | % Change |
|------|-------------|----------|
| 2013 | 829         | --       |
| 2014 | 1,105       | 33       |
| 2015 | 1,293       | 17       |
| 2016 | 776         | (40)     |
| 2017 | 420         | (46)     |
| 2018 | 269         | (36)     |
| 2019 | 37*         | --       |

# Early Turn Statistics

## Flights That Did Not Fly By ZZ000



# Early Turn Statistics

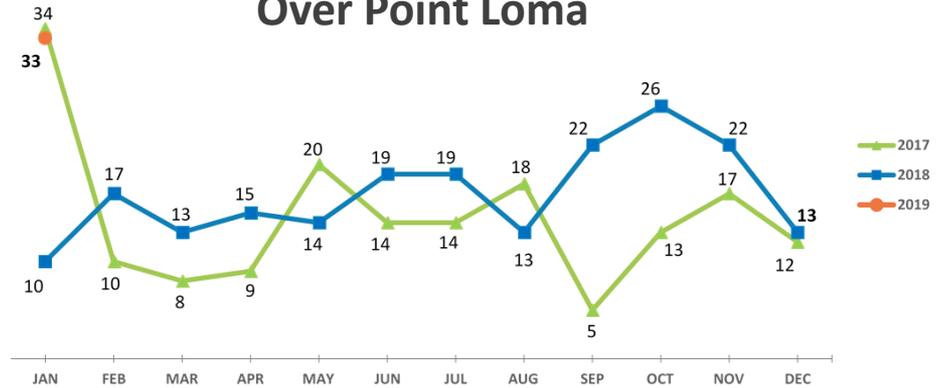
## OPERATORS WITH HIGHEST % OF EARLY TURNS

- Air Canada 1.82%
- Frontier 0.73%
- G/A 0.69%
- Delta Air Lines 0.57%

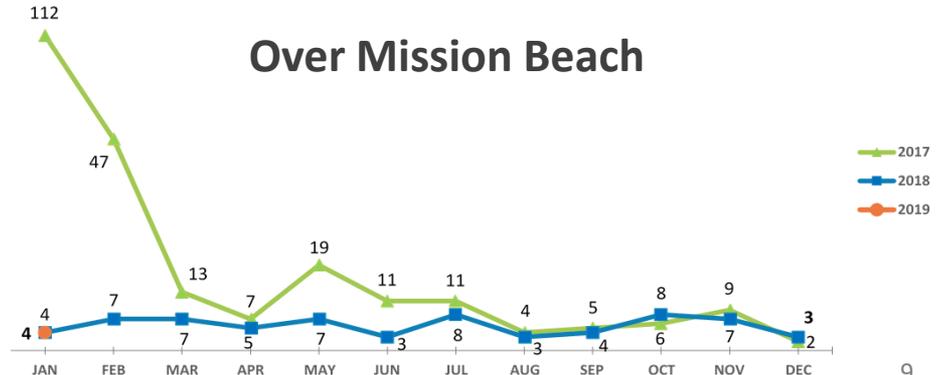
36%

*Overall annual decrease as compared to 2017*

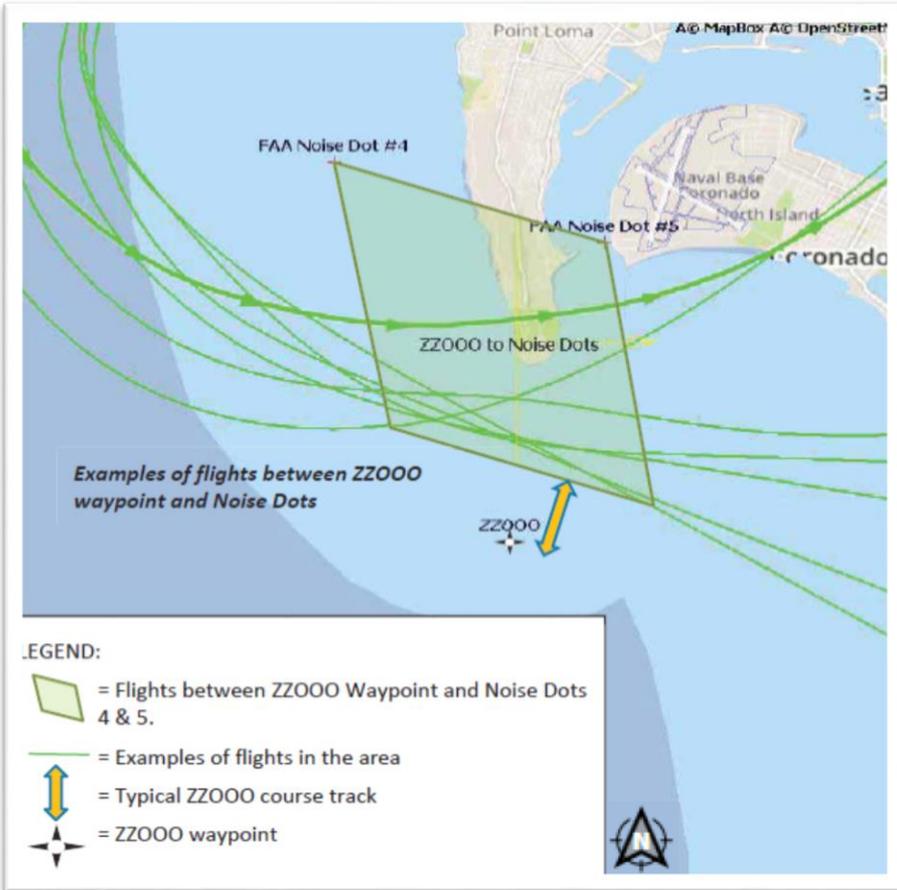
### Over Point Loma



### Over Mission Beach



# Waypoint ZZ000 Departures

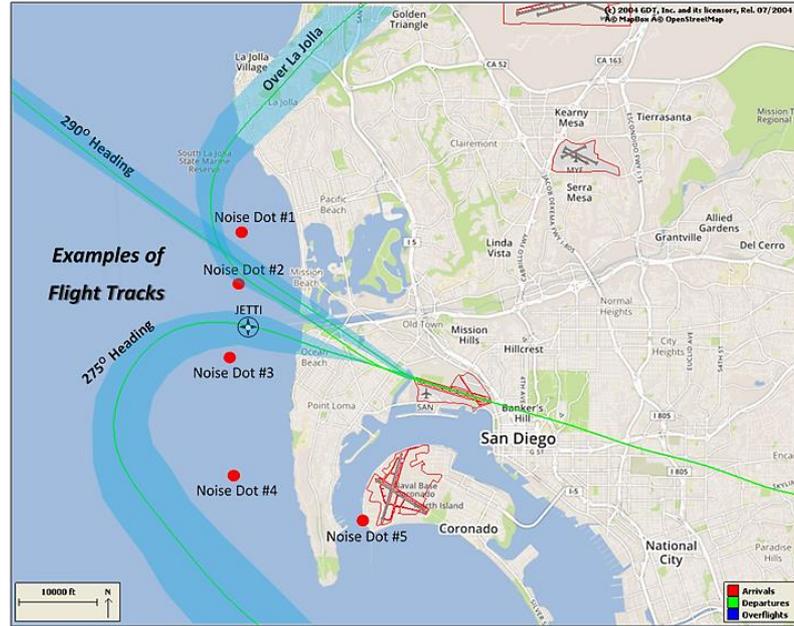


## Flights Between ZZ000 Waypoint and Noise Dots

| Date          | Jets Turning Left | Between ZZ000 & Noise Dots | %   |
|---------------|-------------------|----------------------------|-----|
| December 2018 | 4,506             | 1,110                      | 24% |
| January 2019  | 4,129             | 811                        | 20% |

**NOTE:** *These flights are On-Course and compliant with FAA Noise Dots*

# Nighttime Departures



| Date          | Runway Heading (275°) | Runway 09 | Early Turns | Adhered to Nighttime Dep. (290°) | Total (Jet) | Over La Jolla |
|---------------|-----------------------|-----------|-------------|----------------------------------|-------------|---------------|
| December 2018 | 7                     | 38        | 2           | 328                              | 375         | 23            |
| January 2019  | 9                     | 26        | 0           | 221                              | 256         | 9             |

# Flight Ops Questions ?



# Curfew Violation Statistics

## IN THE LAST TWO MONTHS:

- 5 Curfew Violations (DEC-JAN)
- January 6 CVRP Meeting
  - ✓ 4 Reviewed (1 November, 3 December)
  - ✓ None were penalized due to weather and maintenance
- 2 Violations will be reviewed in April

**2018 - 59 VIOLATIONS/31 PENALIZED**  
**VS**  
**2017 – 72 VIOLATIONS/59 PENALIZED**

## CONTRIBUTORS TO CURFEW VIOLATIONS

- *Local maintenance issues*
- *Local weather*
- *Decline in arbitrary departures*

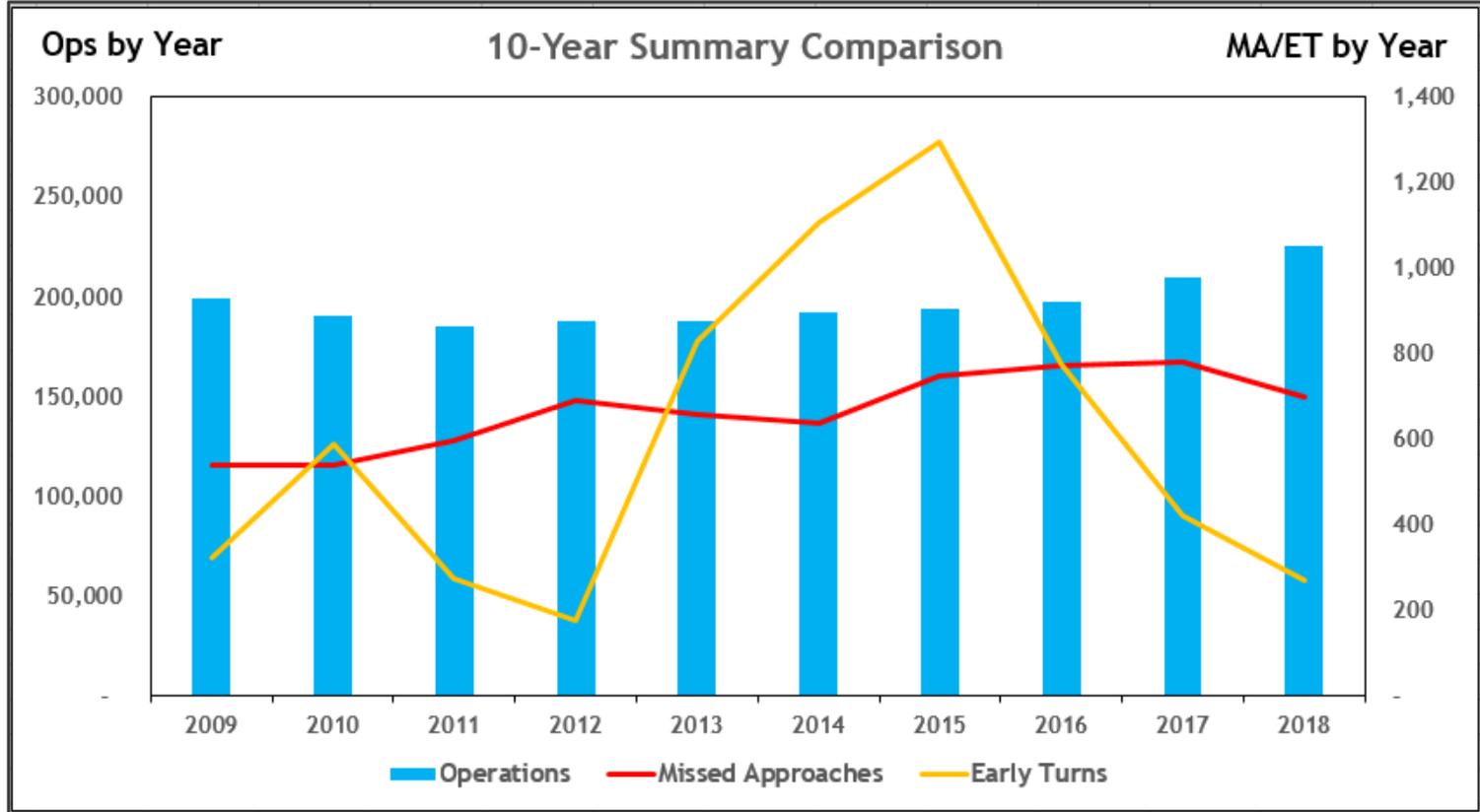
### Penalties

**\$254,000 (2018)**

**VS**

**\$376,000 (2017)**

# Summary Statistics



# Fly Quiet Program Updates

## IN THE LAST TWO MONTHS:

- BA 777 returns March 31
  - ✓ 747 likely continued use in off season
  - ✓ 744 fleet retirement in 2024
- Some softening in scheduled operations for Q1 2018 (5.2% vs. 11.4% in 2017)

New Boeing 200-240 seat aircraft???  
Late 2019/Early 2020 launch  
Medium Range (5,000 miles)

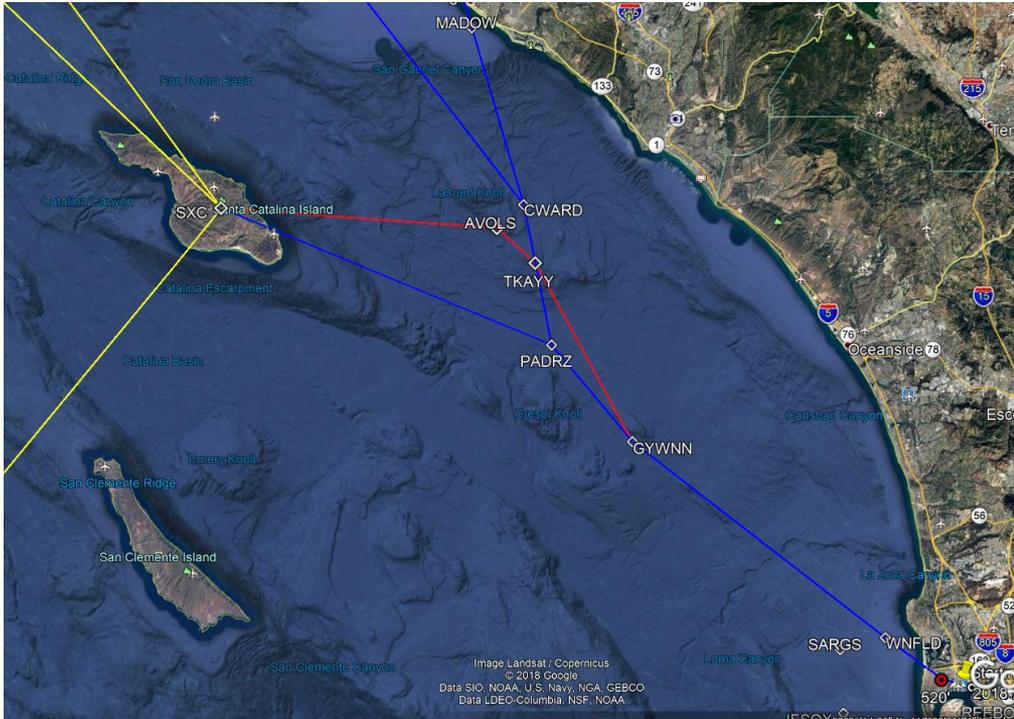


## AIRLINE ACTIONS TO IMPROVE IMPACTS IN 2018

- MD-80 removed from SAN schedules
- Continued increases in the utilization of 737MAX and A320neo
  - ✓ Frontier leads with 23% conversion rate, but score impacted by high use of A321
- 22% reduction in Curfew Violations

| FlyQuiet       | 4 <sup>th</sup> Quarter |
|----------------|-------------------------|
| Best Overall   | Spirit Airlines         |
| Most Improved  | Spirit Airlines         |
| Quietest Fleet | Japan Airlines          |

# New Departure Procedure - TKAYY



**FOLLOWS EXISTING  
RNAV SIDS TO GWYNN  
WAYPOINT**

**CHANGE IS 22-MILES DUE  
WEST OF CARLSBAD**

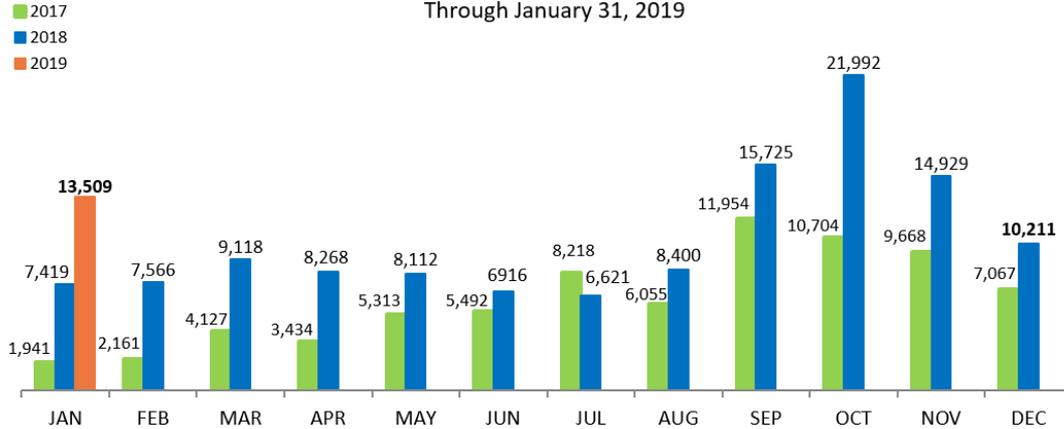
# Curfew and Fly Quiet Questions ?



# Noise Complaint Statistics

## Total Complaints

Through January 31, 2019



\*New noise complaint system started in April 2017.

## Disturbance Type

December 2018 & January 2019

| Reason                  | Number of Complaints | %      |
|-------------------------|----------------------|--------|
| Too Loud                | 23,437               | 98.8%  |
| Too Low                 | 144                  | 0.6%   |
| Overflight              | 69                   | 0.3%   |
| Suspected Off-Course    | 49                   | 0.2%   |
| Curfew Violation        | 14                   | 0.05%  |
| Other                   | 5                    | 0.02%  |
| Pollution               | 1                    | 0.004% |
| Increased Flight Volume | 1                    | 0.004% |

**95% vs. 5%**  
*3<sup>rd</sup> Party vs. Authority Tools*

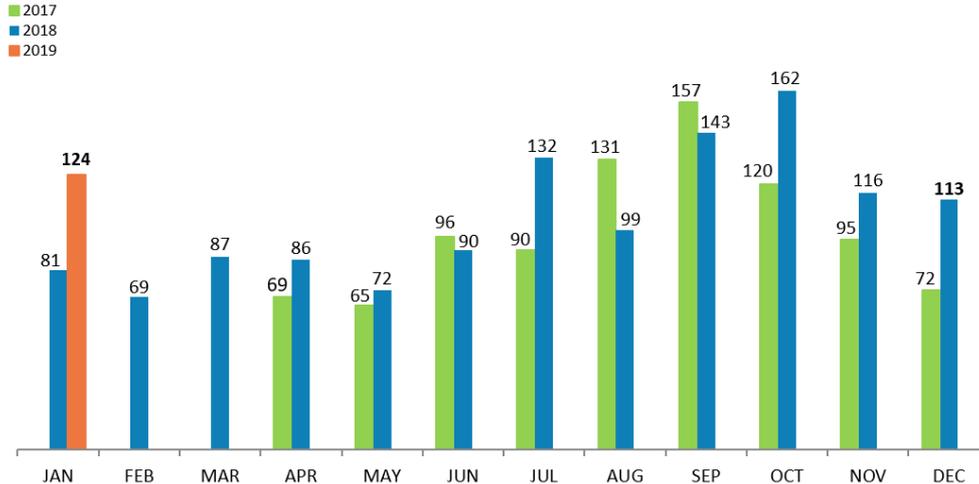
# Noise Complaint Statistics

## IN THE LAST TWO MONTHS:

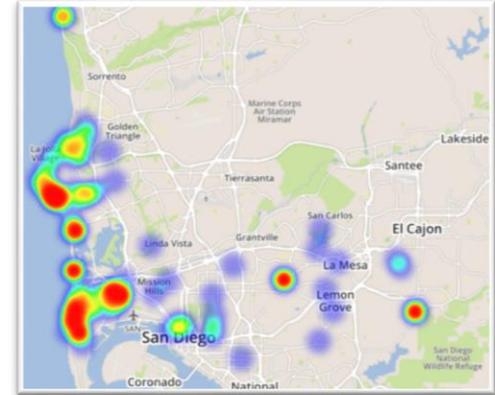
- 27 new households
- 44 less households than October & November
- New zip code, Poway 92064

### Number of Households

Through January 31, 2019



## DENSITY & LOCATION OF COMPLAINTS



| Neighborhood by Zip Code       | Number of Households* |
|--------------------------------|-----------------------|
| La Jolla – 92037               | 48                    |
| OB/Sunset Cliffs – 92107       | 29                    |
| Mission Beach/PB – 92109       | 20                    |
| Pt. Loma 92106                 | 18                    |
| La Mesa/Mt. Helix - 91941      | 4                     |
| Del Mar - 92014                | 3                     |
| Bankers Hill - 92101           | 3                     |
| Other (less than 2 Households) | 24                    |
| <b>Total</b>                   | <b>149</b>            |

\*Combined total for December 2018 & January 2019

# Noise Complaint Questions ?



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