

SFO Arrivals over the Mid-Peninsula

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Californians for Quiet Skies

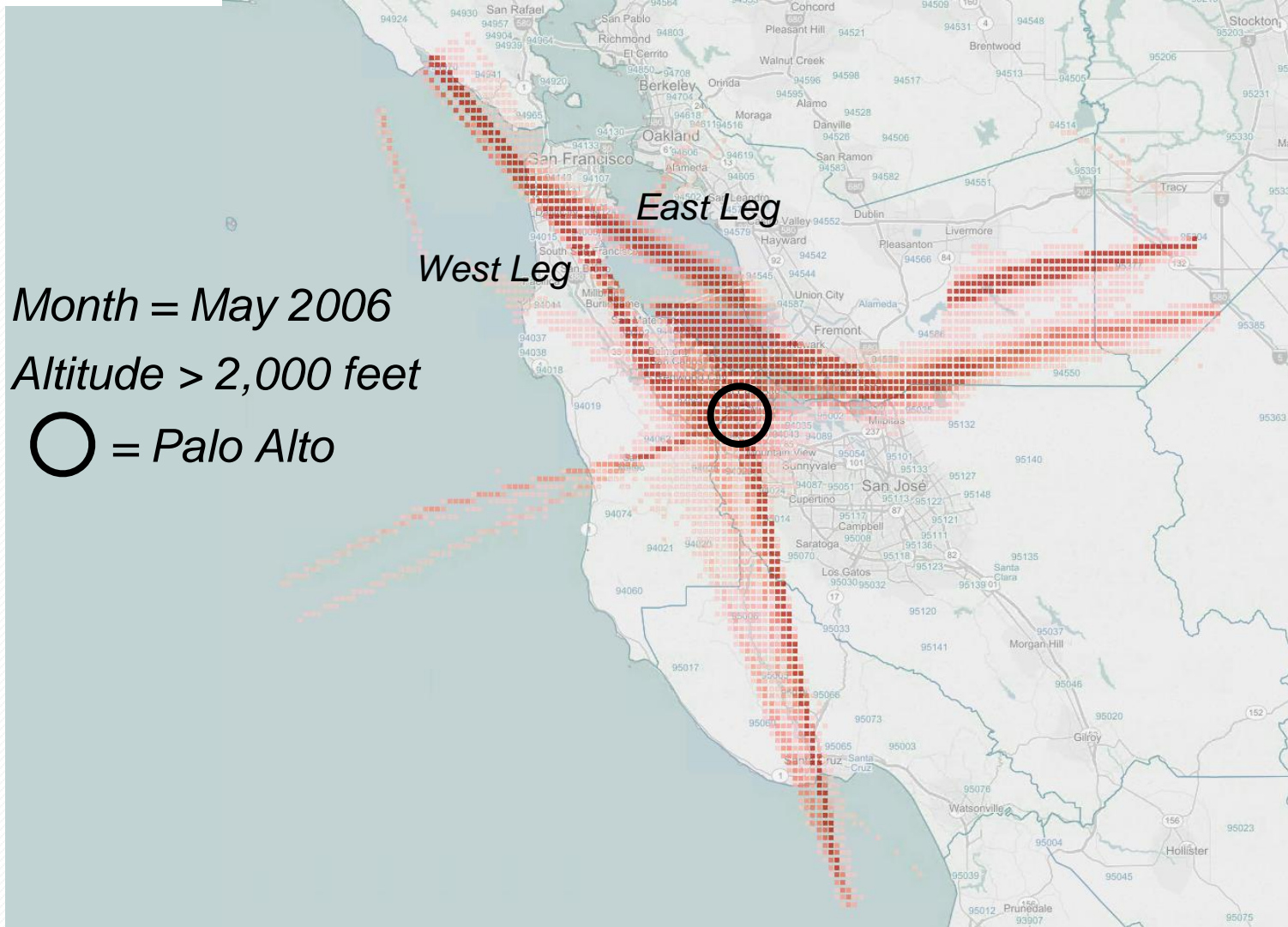
- We Appreciate this Opportunity to Meet
- Formerly Ad Hoc Committee for Noise Abatement in the South Bay representing Portola Valley, Skyline part of Woodside, Ladera, and Stanford Weekend Acres
- Petition to reduce commercial aircraft noise over our areas with over 1,300 signatures online and in paper version
 - >900 Portola Valley residents (# of PV Households: 1,700),
100 Woodside Skyline residents
- Noise problems are due to the Overutilization of the Woodside VOR and Menlo IAF waypoints
- Members of Quiet Skies Mid-Peninsula

FOIA Data Supports Our Observation

- The flight paths for arrivals into SFO have changed over our mid-Peninsula communities, resulting in a disproportionate increase in air traffic.
- Data analysis from Dr. Lee Christel of Sky Posse Palo Alto supports observation.
- Independently validated by the City of Palo Alto's Aviation Consultants.
- The noise is worse after NextGen due to the narrowing of flight paths, lower altitudes and persistent use of delayed vectoring.

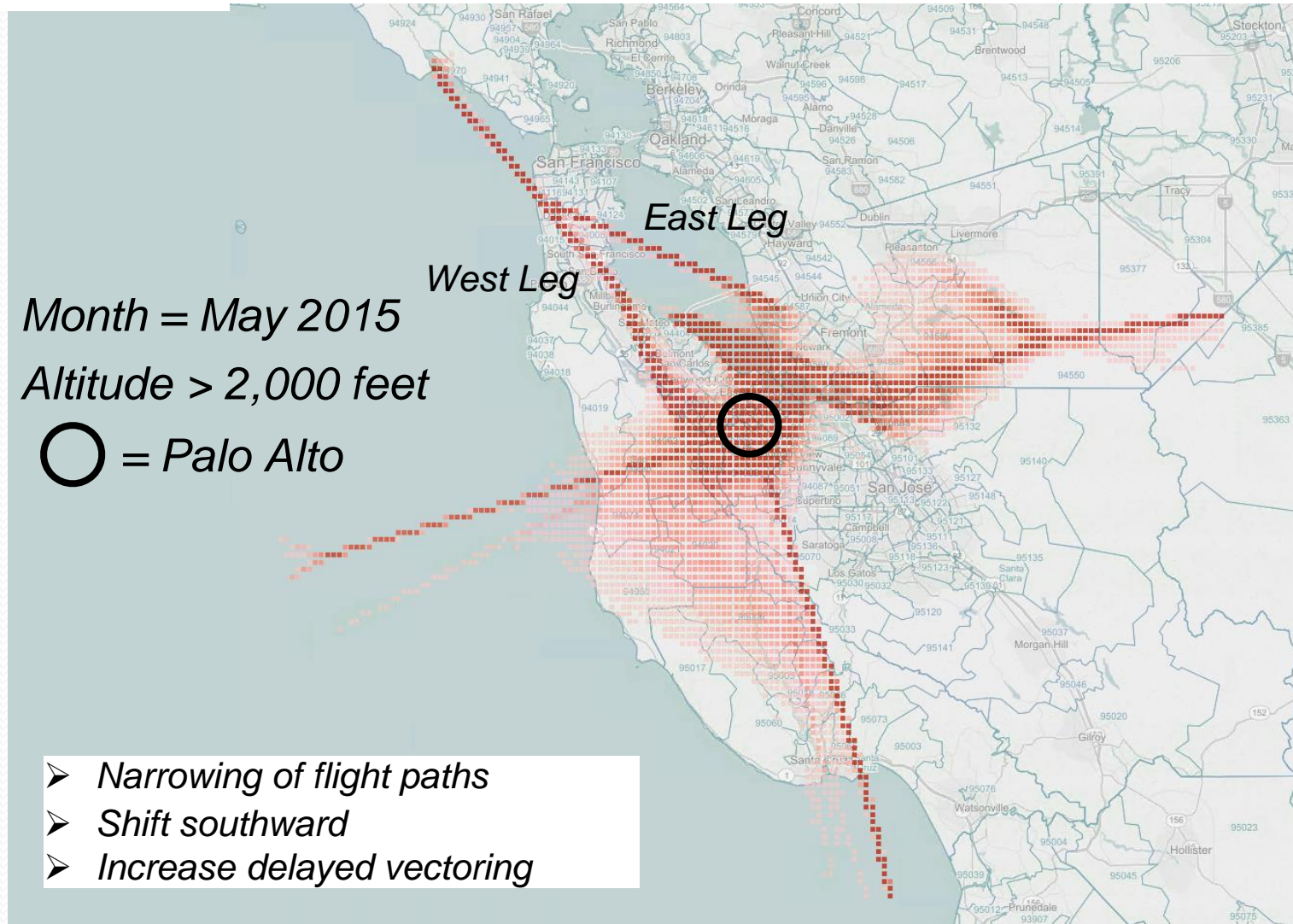
Dr. Lee Christel's Data Analysis

SFO Arrivals in 2006



Dr. Lee Christel's Data Analysis

SFO Arrivals in 2015



Solutions from Mid-Peninsula Community Advocacy Groups that were Omitted or Inadequately Addressed by FAA

- Pertaining to Utilization of Woodside VOR
- Using FAA Published Offshore Holding Patterns
- Rebalancing BDEGA Northern Arrivals East Leg and West Leg
- Using full length of the bay for some Southern Arrival flights

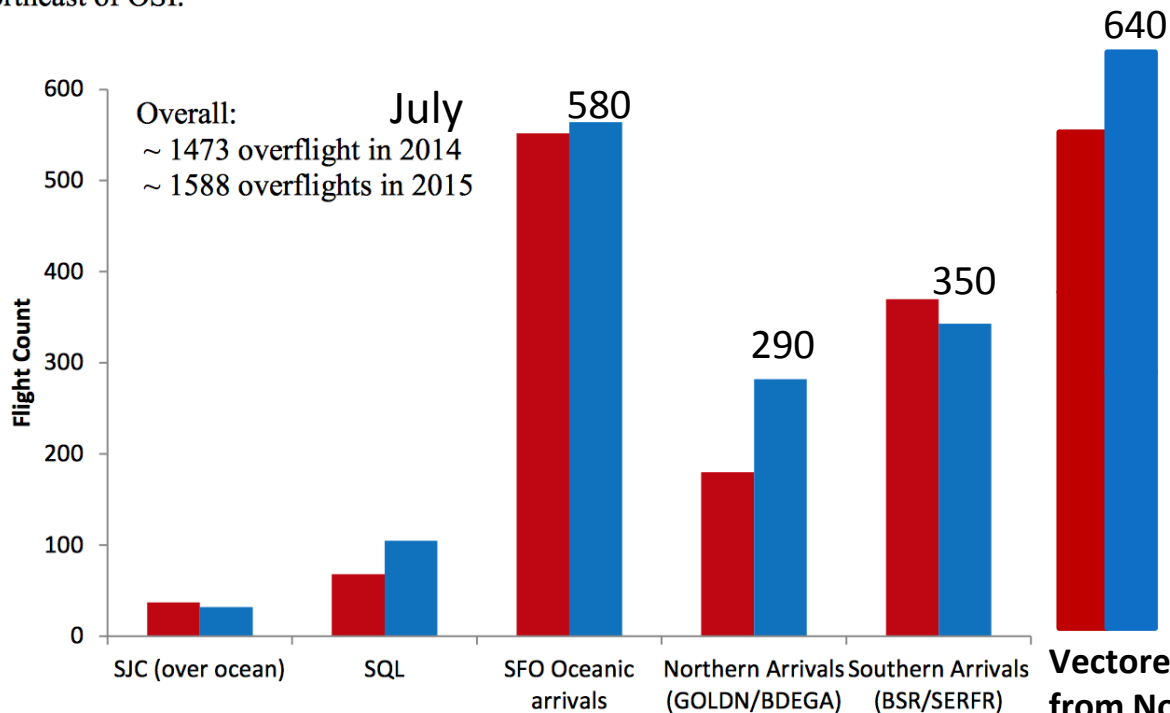
FAA Initiative and Feasibility Report

RE: Woodside VOR

From FAA Feasibility Study Appendices Page F2

Flight Activity Over OSI

A comparative analysis of overflights within 1NM of Woodside VOR (OSI) was conducted for July 2014 and July 2015. The results are shown in Figure F.1. These results indicate that the majority of aircraft flying within 1NM of OSI are oceanic arrivals, primarily into SFO. There is also some vectoring activity of SFO arrivals from the north and from the south. Additionally, there is also some activity associated with San Carlos Airport, which is located 7.3 NM to the northeast of OSI.



Error & Omission in Report

- Vectoring over Woodside VOR from Northern and Southern Arrival routes accounts for more overflights than Oceanic Arrivals.
- Only the altitudes of Oceanic flights were studied.
- Figure F.1. also shows a 7.8% increase in number of flights over Woodside VOR within 1 year (1473 in July 2014 to 1588 in July 2015)

FAA Initiative and Feasibility Report

Vectoring ≠ Equitable Dispersion

BDEGA Route: Flights from Europe, Canada, northern U.S. states

Rerouting of Aircrafts or “Vector Trafficking” over to Woodside VOR

Oceanic/Woodside VOR Route: Flights from Asia and Hawaii islands

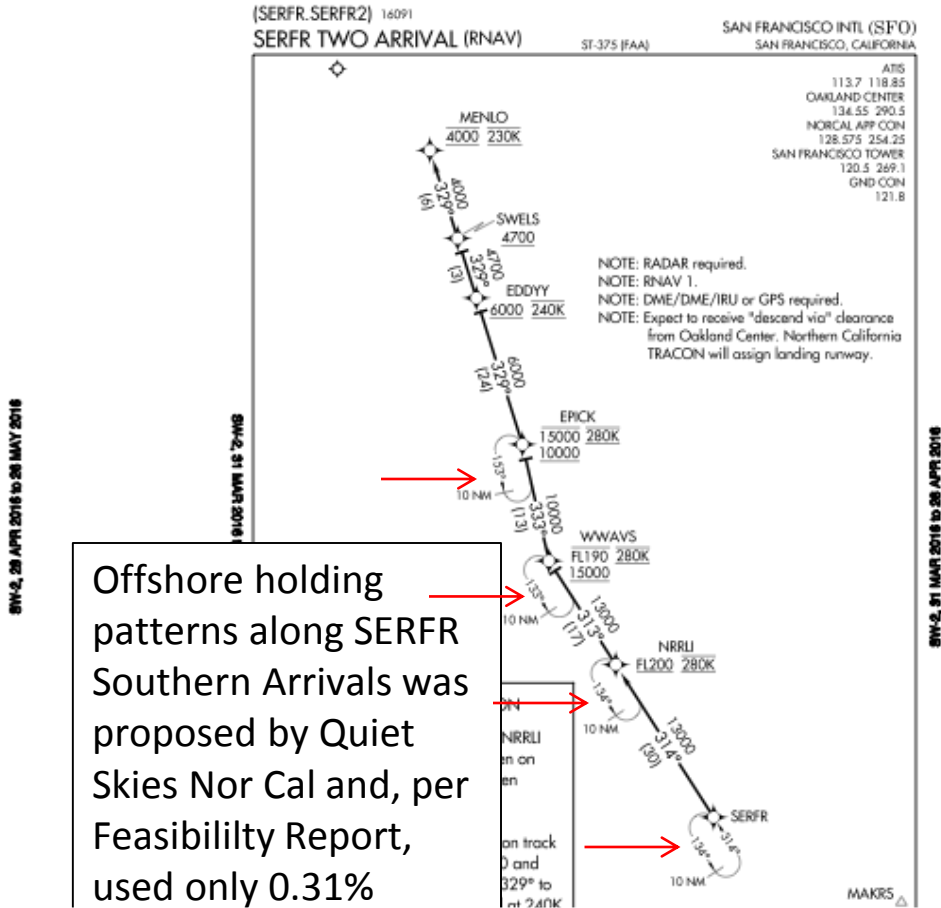
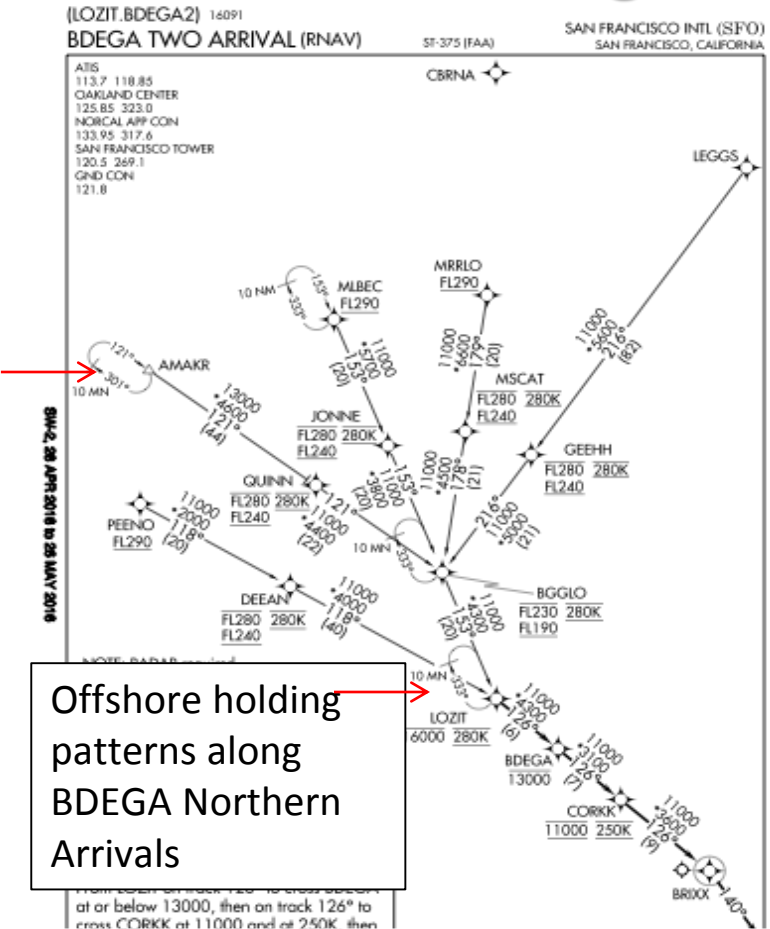
SERFR Route: Flights from southern CA cities, Phoenix, Mexico, El Salvador, etc.

- Aircraft cluster over the same residential areas in the close vicinity of the Woodside VOR and then over to other mid-Peninsula communities.
- Vectored flights are noisier than ones following constant descent published route due to engine throttle, low altitudes, and traveling a longer distance over residentially areas.
- “Mid-Peninsula has become the unofficial holding pattern for SFO”.

- United Airlines Pilot

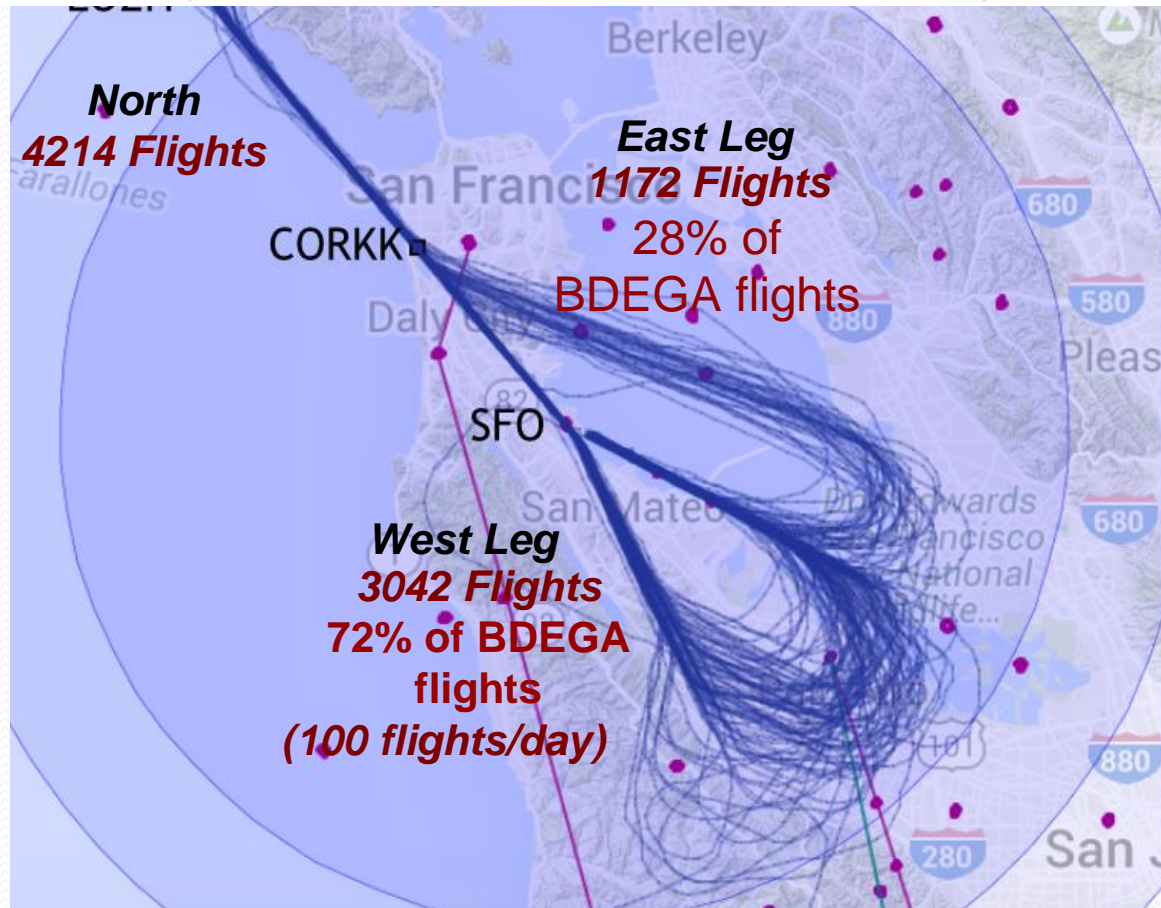
FAA Initiative and Feasibility Report

Offshore Holding Patterns not adequately addressed



- Holding patterns at high altitudes and constant velocity are operationally efficient (less costly to airlines) compared to vectoring.
- For noise abatement and operational efficiency, ATC should use holding patterns in FAA published routes instead of using vectoring to Woodside VOR and mid-Peninsula as a holding pattern.

SFO Northern Arrivals Approach (BDEGA STAR Route)



- Submitted to FAA for consideration on 10/9/2016.
- Traffic on west leg (over populated areas) significantly increased and on east leg (over the bay) significantly decreased recently.
- **Not addressed in FAA Initiatives.**

SFO Southern Arrivals Approach

Submitted to FAA on 10/9/15 and reiterated in Sky Posse Palo Alto Letter 6/1/16

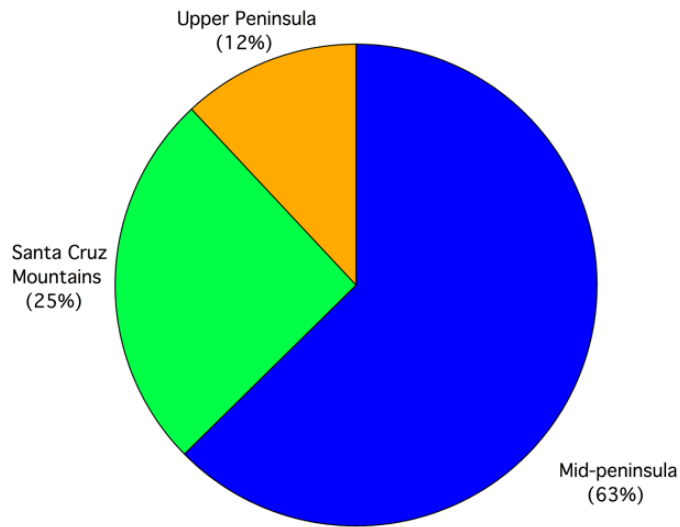


Figure 3 – Full-Bay conceptual approach over the Bay.

➤ **Not addressed in FAA Initiatives.**

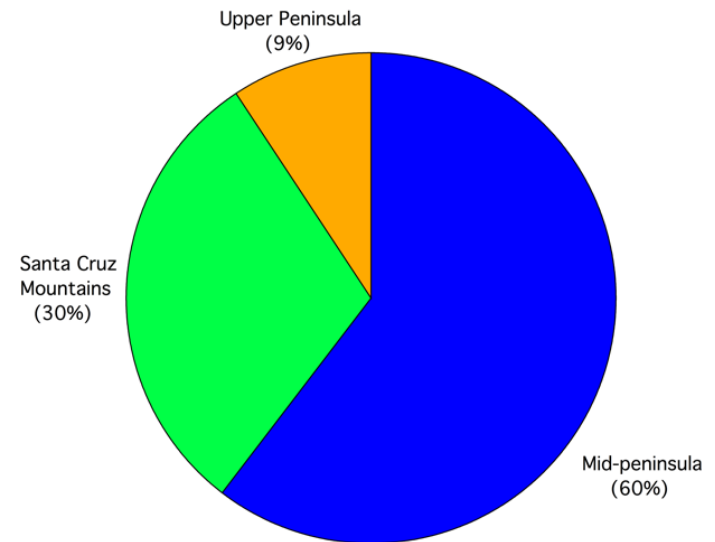
Airplane Noise Reports from Stop Jetnoise for May 2016

Unique Individuals Filing



1,890 individuals filed reports

Reports Filed



330,980 noise reports filed

- Mid-Peninsula Towns and Cities account for the majority of complainants and reports filed.
- The FAA proposals reject solutions that would provide relief for the mid-Peninsula and therefore should not be considered a Regional set of solutions.

Mid-Peninsula Quiet Skies Principles

- Aircraft noise should trump airline operational efficiency
- Aircraft noise, as experienced by people on the ground, must be measured
- The process to review changes must be open, transparent and fair
- Solutions must be neighborly (e.g. do not create noise ghettos)

Our Requests to the Select Committee

- Have the FAA develop specific solutions for the mid-Peninsula
- Create a transparent and inclusive process to address the issue of noise
 - A systematic approach working in partnership with the FAA
- Establish a permanent committee of elected officials
- Create a permanent technical working group
- Employ international best practices for meaningful noise reduction e.g.
 - Route aircraft over non-populated areas (ocean, bay, wetlands, industrial areas)
 - Disperse aircraft traffic
 - Curtail night flights over residential areas
 - Use the steepest possible angle of descent