

CONSENT CALENDAR
April 20, 2021

To: Honorable Mayor and Members of the City Council

From: Councilmember Ben Bartlett (Author), Terry Taplin, and Kate Harrison (Co-

Sponsors)

Subject: Letter of Opposition to the Federal Aviation Administration's proposal

to shift the WNDSR commercial airliner flight corridor directly over residential

neighborhoods in Berkeley, Richmond, El Cerrito, and Albany

#### RECOMMENDATION

That the Mayor of Berkeley and Members of the City Council oppose the Federal Aviation Administration's (FAA) proposal to re-route commercial airline traffic (the WNDSR arrival flight path to Oakland International Airport) directly over residential neighborhoods in Berkeley, Richmond, El Cerrito, and Albany beginning in October 2021. The Council should send letters to Rep. Barbara Lee, Rep. Mark DeSaulnier, Sen. Dianne Feinstein, Sen. Alex Padilla, Governor Gavin Newsom, State Senator Nancy Skinner, Assemblymember Buffy Wicks, US Secretary of Transportation Pete Buttigieg, the FAA's Western Pacific Regional Director, Raquel Girvin, and the Oakland Airport Community Management Noise Forum facilitator, Mike McClintock.

#### **CURRENT SITUATION**

On May 28, 2020 at the FAA Briefing to Oakland Airport Noise Forum – NextGen Technical Subcommittee they announced plans to shift the WNDSR Area Navigation procedure for aircraft arriving into the Oakland International Airport starting October 2021, as part of additional Air Traffic Control modifications to the Northern California Metroplex. Aircraft arriving from the north and east currently fly down the spine of the East Bay Hills. This proposal would shift the path two miles southwest-- directly over Berkeley, Richmond, El Cerrito, Albany, and a larger section of Oakland and Piedmont. In Berkeley, this area encompasses South, West. Central, and North parts of the city. According to the FAA, 163,000 residents will be adversely impacted instead of the current 76,000 residents.

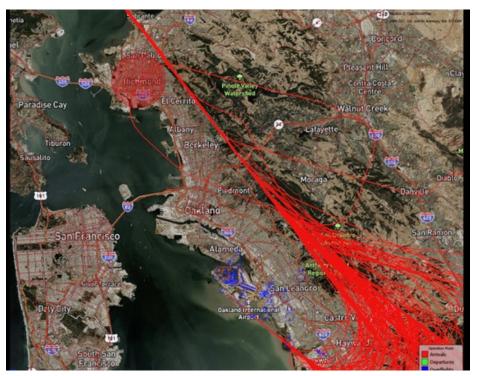
#### **BACKGROUND**

The FAA has cited safety concerns related to the complexity of Bay Area airspace in its proposal to move the flight path. The agency points to the current path of 35+ aircraft per day over the East Bay Hills as being located too close to a departure path, as well as traffic from neighboring airports. The agency has considered and rejected alternative WNDSR paths proposed by the

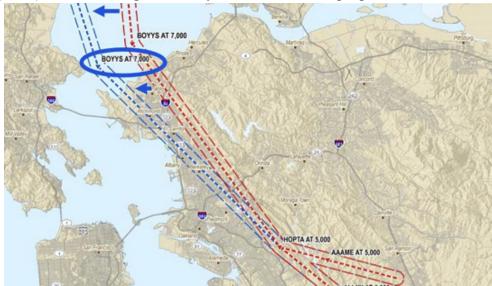
<sup>&</sup>lt;sup>1</sup>Federal Aviation Administration: "<u>FAA Briefing to Oakland Airport Noise Forum-- NextGen Technical Subcommittee</u>," May 28, 2020

<sup>&</sup>lt;sup>2</sup>Richmond Pulse: "Oakland Airport Flight Path Could Go Over Heart of Richmond," July 17, 2020.

Oakland Airport Community Noise Management Forum.



Above is a map showing the current path of departures from Oakland International Airport (OAK), demonstrating the density of the WNDSR flight path.



Above is a map showing the proposed change in the WNDSR flight path running directly through the Center of Berkeley.

Since first presenting its proposal to the public through a quarterly meeting of the Oakland

Airport Noise Forum in July 2020, the FAA has not conducted a meaningful public outreach and engagement process to inform impacted residents, described the type of environmental analysis that will be carried out to analyze the impacts of the modification, or addressed concerns about how the proposed changes will affect communities that have historically suffered the most from environmental injustice, as living near airports has been linked to greater risks of adverse impacts to health.

Numerous studies have shown that people living near airports are exposed to higher health risks.<sup>3</sup> Notable risks include high blood pressure<sup>4</sup> and heart disease<sup>5</sup>, which are just two of the effects of aircraft noise and polluting, high particulate levels in ambient air. The proposed path of the WNDSR corridor goes directly through cities that have historically suffered adverse environmental discrimination with attendant health imapets.

#### REVIEW OF EXISTING PLANS, PROGRAMS, POLICIES, AND LAWS

Currently, the WNDSR flight corridor requires aircraft to fly along the East Bay hills, avoiding the Berkeley flatlands.

#### RATIONALE FOR RECOMMENDATION

The change in the WNDSR path proposed by the FAA would result in aircraft flying through the heart of Berkeley flatlands at a height of 4,000-5,000 feet, if not lower. The resulting noise and emissions pollution would have detrimental health impacts to the Berkeley community.

#### ENVIRONMENTAL SUSTAINABILITY

The FAA has declined to conduct an adequate environmental analysis to determine how the flight path change will impact communities.

#### FISCAL IMPACTS

No fiscal impacts besides staff time.

#### CONTACT PERSON

Councilmember Ben Bartlett: 510-981-7130 James Chang 510-981-7131 Lev Gordan- Feierabend 510-981-7135

#### ATTACHMENTS AND MATERIALS

- 1. Sample Letter to Elected Officials, FAA, and the Oakland Airport Community Noise Management Forum
- 2. May 28, 2020 Briefing to the Oakland Airport Noise Forum's NextGen Technical Subcommittee
- 3. July 16, 2020 *Richmond Standard* Article, "Richmond Speaks Out Against Proposed Flight Path Over City"
- 4. January 25, 2021 Letter to the FAA from Rep. Mark DeSaulnier and Rep. Barbara Lee

<sup>&</sup>lt;sup>3</sup> https://www.latimes.com/local/la-me-0529-lax-pollution-20140529-story.html

<sup>&</sup>lt;sup>4</sup> https://catalog.camfil.us/living-near-an-airport-could-be-a-matter-of-life-and-death.html

<sup>&</sup>lt;sup>5</sup> https://deohs.washington.edu/hsm-blog/measuring-seatac-air-traffic-pollution

Attachment 1: Sample Letter

RE: Proposed FAA Flight Path Changes Affecting Berkeley, California

Dear [Name of Official],

On behalf of the City of Berkeley, California, we are writing to voice our opposition to the Federal Aviation Administration's (FAA's) July 2020 proposal to modify the WNDSR Area Navigation procedure. This proposal would shift the path of flights arriving to the Oakland International Airport (OAK) over the Berkeley flatlands and neighboring communities, which have historically suffered adverse environmental effects. The proposed change would exacerbate existing environmental inequities faced by communities of color.

We are opposed to this change for the following reasons:

- The Berkeley flatlands already shoulder an unequal share of environmental injustices as a formerly redlined area.
- Airplanes negatively impact the health of the communities they fly over. Studies by the University of Washington<sup>6</sup> and University of California Irvine<sup>7</sup> have linked the air and noise pollution resulting from the proximity of planes to serious illnesses like heart disease and high blood pressure.
- The FAA has not conducted adequate outreach on this issue in our diverse community. Apart from the Oakland Airport Community Noise Management Forum, the vast majority of Berkeley residents are not aware of the proposal and have not been asked to give their input.
- The proposed change affects more than twice the number of residents. According to the FAA, 163,000 residents would be negatively impacted, compared to the current 76,000 residents.<sup>8</sup>
- The FAA has not provided alternative routes. If the FAA is serious about planning with impacted communities, and resolving noise and emissions problems, the FAA must offer alternative flight paths for consideration.
- The proposal runs counter to California AB 617, the Community Air Protection Program of 2017, which calls for the reduction of pollution in California's most vulnerable communities.

<sup>&</sup>lt;sup>6</sup> https://deohs.washington.edu/hsm-blog/measuring-seatac-air-traffic-pollution

<sup>&</sup>lt;sup>7</sup> https://pubs.acs.org/doi/full/10.1021/es5001566

<sup>8</sup> https://richmondpulse.org/2020/07/17/oakland-airport-flight-path-could-go-over-heart-of-richmond/

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In light of what we perceive to be the FAA's failings in these areas, we urge the FAA to immediately:

- 1. Conduct a meaningful public outreach and engagement process to inform impacted residents.
- 2. Describe the type of environmental analysis that will be carried out to analyze the impacts of the modification.
- 3. Address concerns on whether the proposed changes will affect communities that have historically suffered the most from environmental injustice.

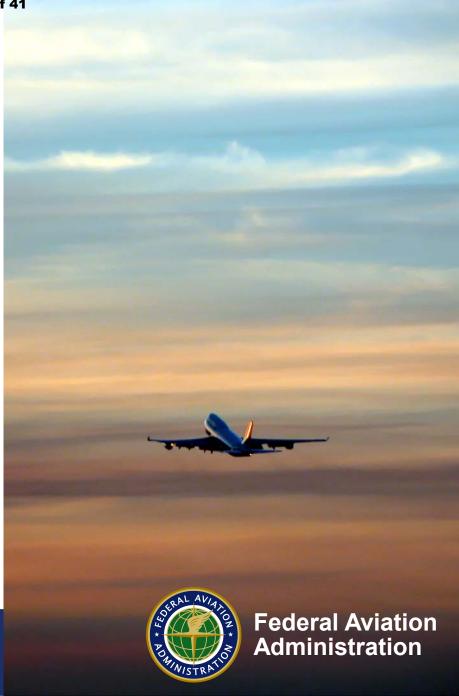
We are grateful for your attention to this issue and look forward to your response.

Sincerely,

[Mayor of Berkeley and Members of the City Council]

## **FAA** Briefing to **Oakland Airport** Noise Forum -NextGen **Technical Subcommittee**

**Supplemental Information to May 28, 2020 Briefing** 



## Purpose of this Briefing

- Provide an update on HUSSH SID IFP Gateway request
- Explain the need to modify the current WNDSR STAR
- Explain the Air Traffic constraints in the area as they relate to the current WNDSR STAR and the proposed modifications

## Purpose of this Briefing

#### To show relationships between:

- Current WNDSR2 STAR
- Proposed change to WNDSR STAR as designed by the FAA Performance Based Navigation Full Working Group
- Proposed change to WNDSR STAR with input from Oakland Airport
- OAK Arrival tracks from the northwest, both pre- and post- WNDSR STAR implementation
  - Pre-WNDSR Arrivals limited to those that filed the RAIDR STAR
- Next steps

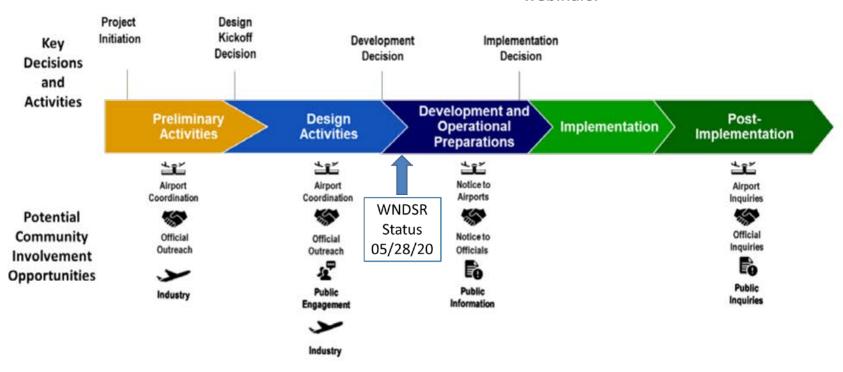


## **HUSSH SID IFP Gateway request**

- An Instrument Flight Procedures Gateway request, to amend the initial altitude on the HUSSH SID from OAK, was submitted by the Oakland Airport on 10/16/2019
- The request is in the PBN 7100.41 process and is currently awaiting decision by the Flight Procedure Prioritization Team

#### **Performance Based Navigation Process Timeline**

Public Engagement may include briefings to roundtables, elected local, state, or federal officials and workshops, videos or webinars.

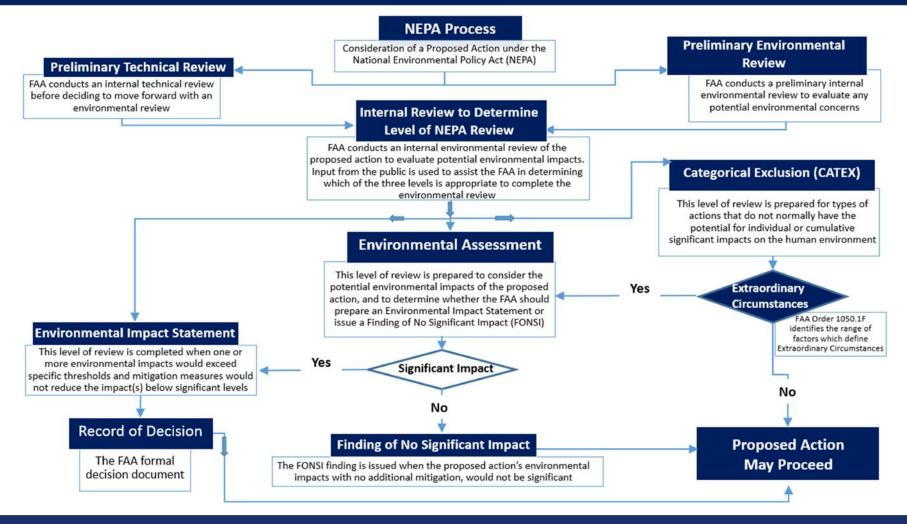


Note: The need for and level of engagement will vary based on project circumstances

The environmental review for procedures developed in this process occurs as a final step to the design activities.



## This chart shows the environmental steps the FAA would follow if the agency develops any of the conceptual changes. Non-finalized procedures generally do not start this process until finalized.



## Need for modifying the WNDSR STAR

 Within days of the publication of the WNDSR STAR, Oakland ARTCC and NorCal TRACON realized the new WNDSR STAR, being shifted to the North/Northeast, did not provide the separation from departures that the previous RAIDR STAR did.

## Need for modifying the WNDSR STAR

- While very similar, the new WNDSR STAR, in conjunction with other procedures implemented at the time, reduced the ability for controllers to more dynamically establish OAK arrivals on the downwind for runway 30
- This often keeps departures from SFO and OAK below the arrival stream over the Richmond area
  - Arrivals may need to level off and increase thrust and/or departures may need to slow climb and remain at a lower altitude



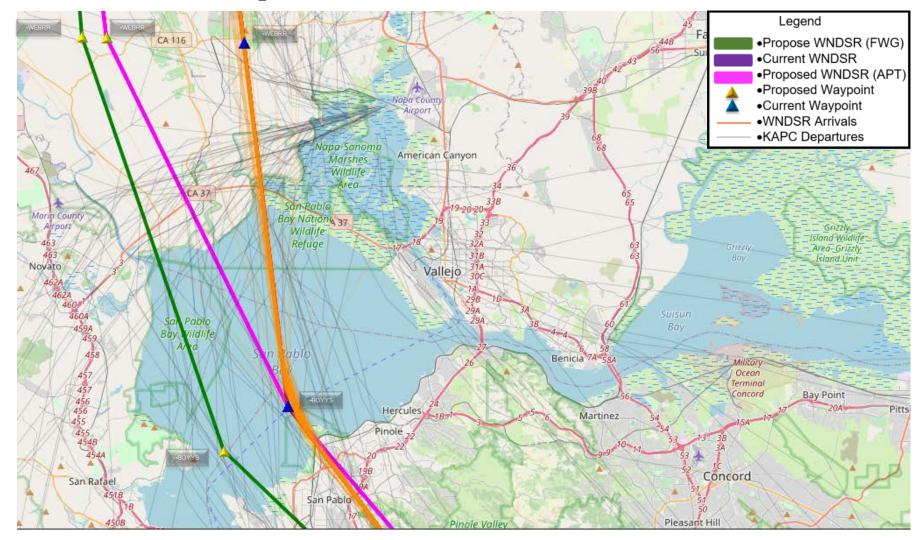
# Air Traffic Constraints with Respect to the current WNDSR STAR

- Napa County Airport Departures and Arrivals
- Travis Air Force Base Airspace
- Some SFO and OAK departures currently pass under arrivals, unable to climb until clear
- Higher terrain to the east
- SFO and OAK arrivals from the east/southeast

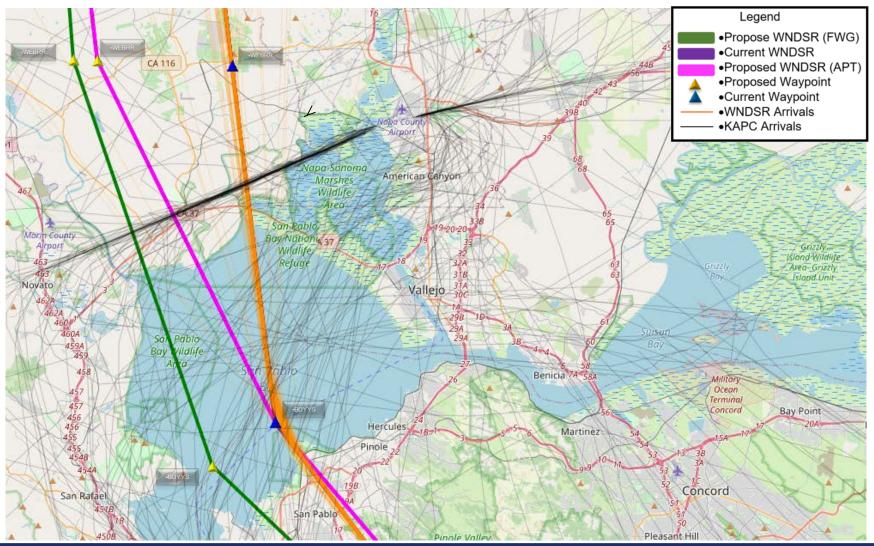
# Air Traffic Constraints with Respect to the current WNDSR STAR - Napa

 Confliction with Napa County Airport (KAPC) traffic between WEBER and BOYYS waypoints

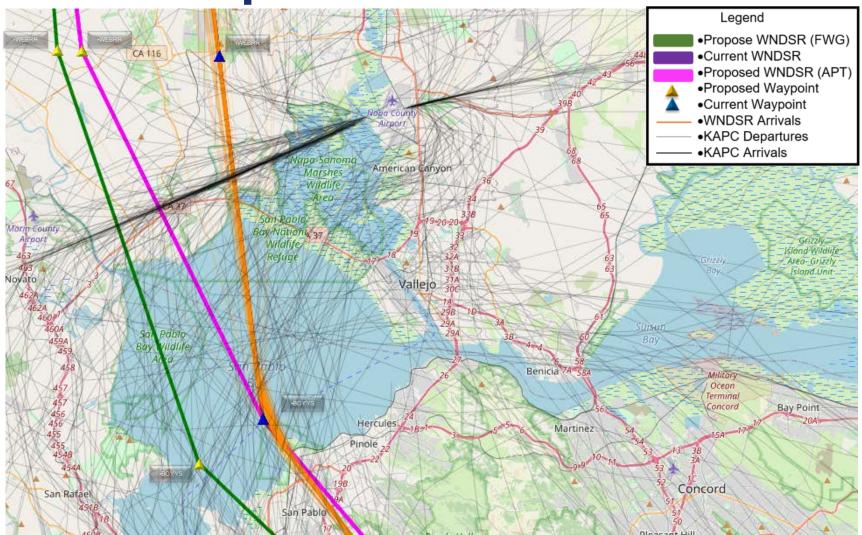
## **KAPC Departures**



### **KAPC Arrivals**



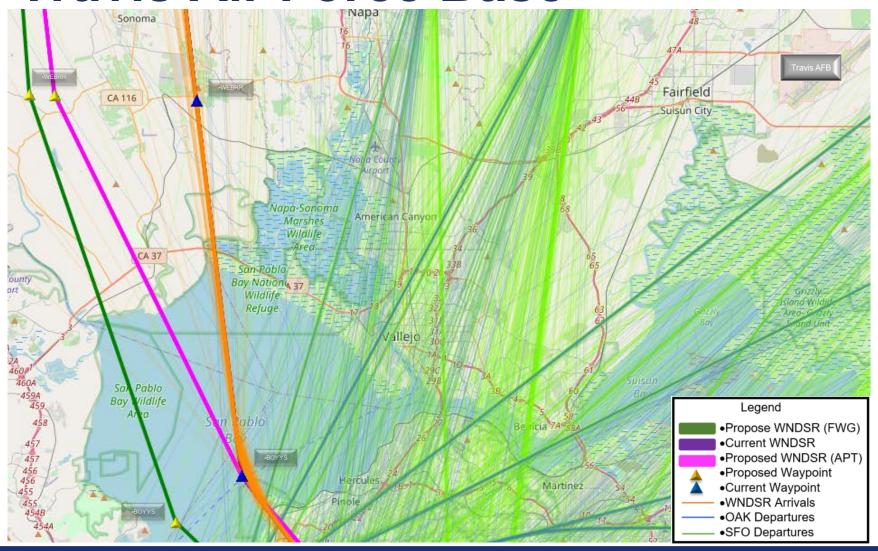
## **KAPC Departures/Arrivals**



## Air Traffic Constraints with Respect to the current WNDSR STAR – Travis Air Force Base

- Proximity of BOYYS to HOPTA segment to Travis Air Force Base (AFB) airspace
  - Route cannot be moved further east without encroaching on AFB airspace and potentially requiring individual coordination for each arrival
  - OAK and SFO departures must be at or above 11,000 prior to the Travis AFB airspace

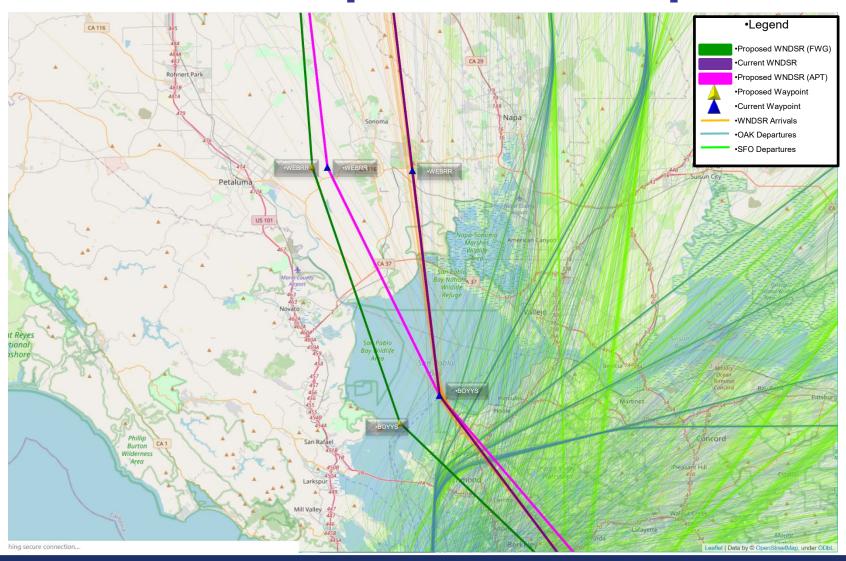
### **Travis Air Force Base**



# Air Traffic Constraints with Respect to the current WNDSR STAR – OAK/SFO Departures

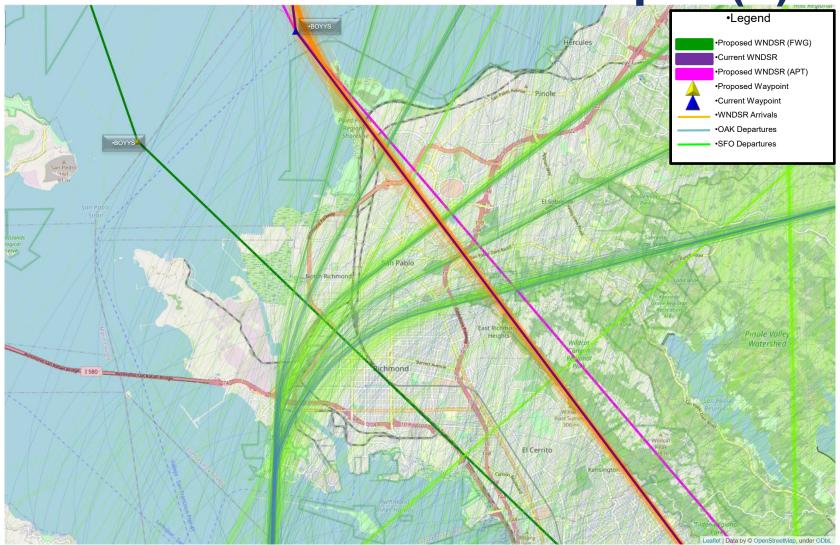
- Major crossing point with OAK and SFO departures over the Richmond area
- Current design often requires level-offs for departures and/or arrivals
- Departures need to continue climbing to reach 11,000 to avoid Travis AFB
- Departures currently passing below arrivals are able to climb sooner with BOYYS moved west

## SFO/OAK Dept toward Napa



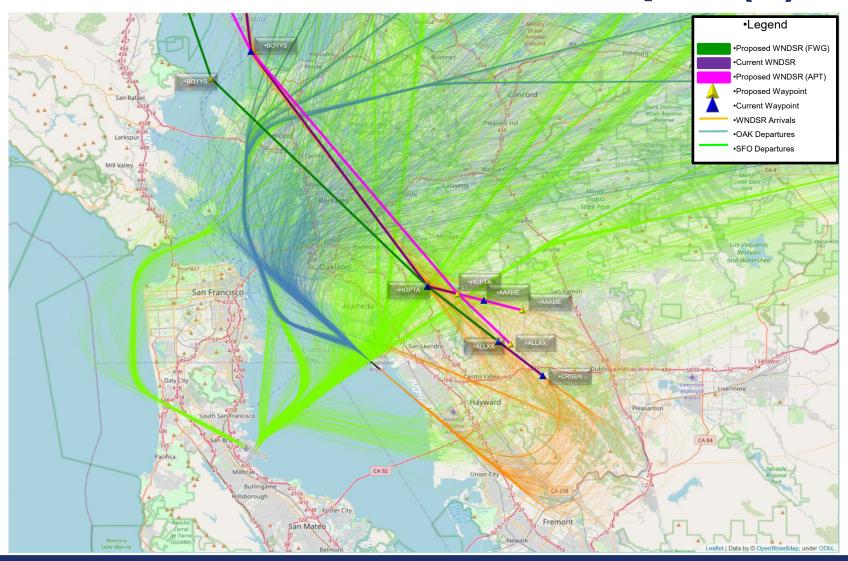


WNDSR - SFO & OAK Depts (1)



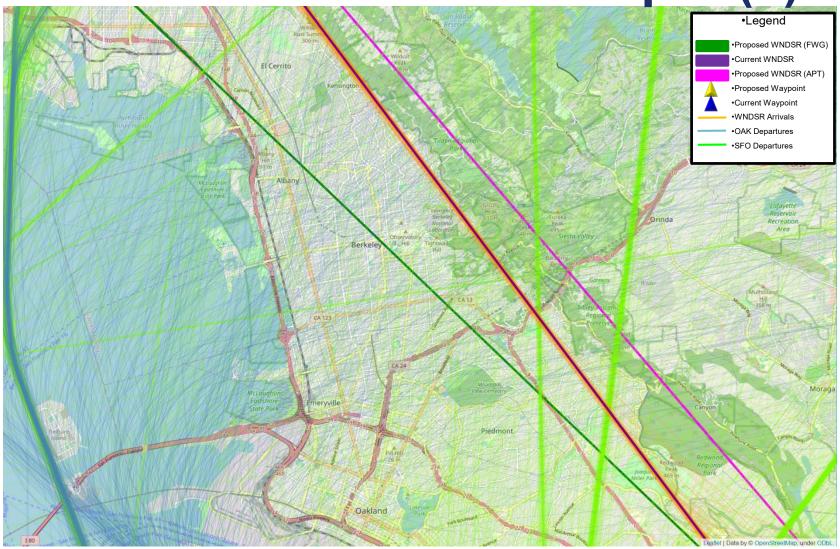


## WNDSR - SFO & OAK Depts (2)





## WNDSR - SFO & OAK Depts (3)



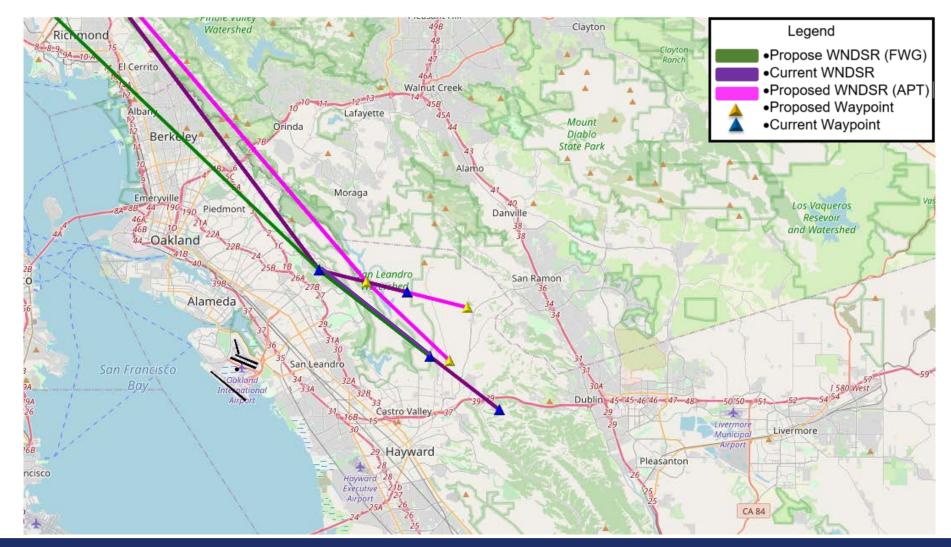


# Air Traffic Constraints with Respect to the current WNDSR STAR – Terrain to the East

#### Terrain

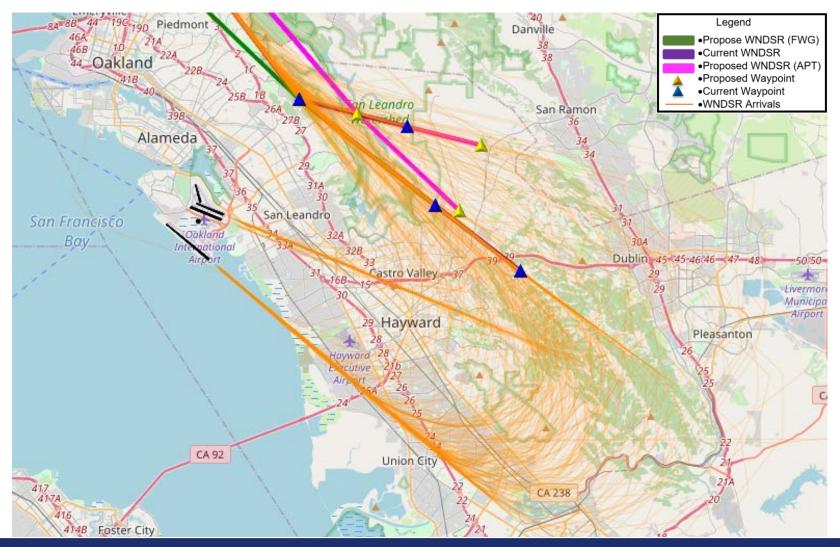
- As the terrain is higher to the east, this also increases the altitude aircraft are required to fly while on the STAR.
   Given the same location on a downwind in relation to the airport, a higher altitude requires a longer downwind and final approach segment to maintain the same level of approach stability.
- This also creates a conflict with Hayward Executive Airport departures, as it often causes them to be "trapped" between a descending OAK arrival and the rising terrain.

### **Constraint of Terrain**





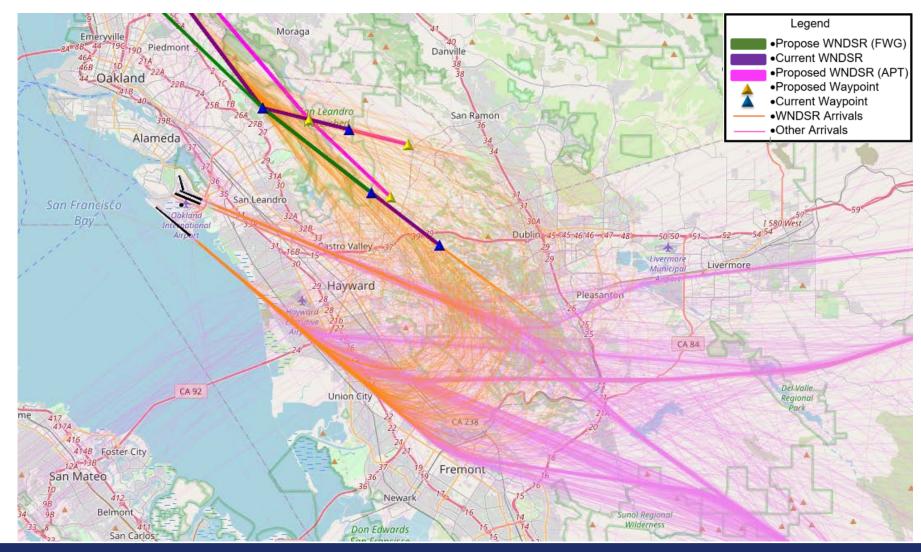
### **Constraint of Terrain**



# Air Traffic Constraints with Respect to the current WNDSR STAR – Other Arrivals

- Sequencing with other arrivals
  - If moved further east, the change in the intercept angle between the WNDSR and OAKES/EMZOH STARS creates increasing complexity when sequencing arrival aircraft

### SFO & OAK arrivals from E/SE



### **Next Steps**

- This briefing was designed to show the latest design for the proposed WNDSR STAR amendment, as well as the status of the HUSSH SID amendment request.
- While there has been an operational need to modify the WNDSR for many years, including several air traffic safety reports, the FAA remains committed to working with the Subcommittee and Forum in addressing aircraft noise based issues in the area.

## **Next Steps**

 The FAA will continue collaboration with the Subcommittee and Forum, even after potential publication of the WNDSR STAR, as briefed.

#### Data used

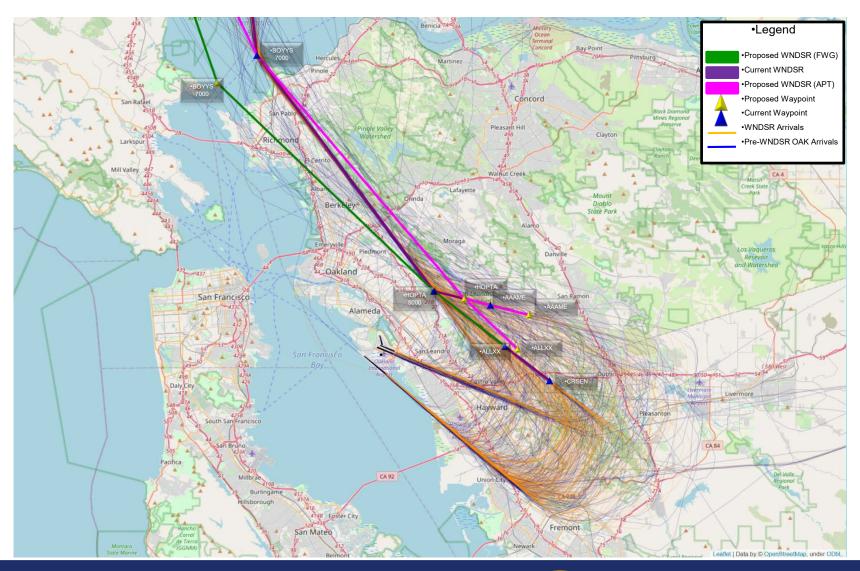
#### Pre-WNDSR OAK Arrivals

- May 20, 2015 August 7, 2015
  - More tracks were used to better represent aircraft arriving via the RAIDR STAR

#### All other track categories

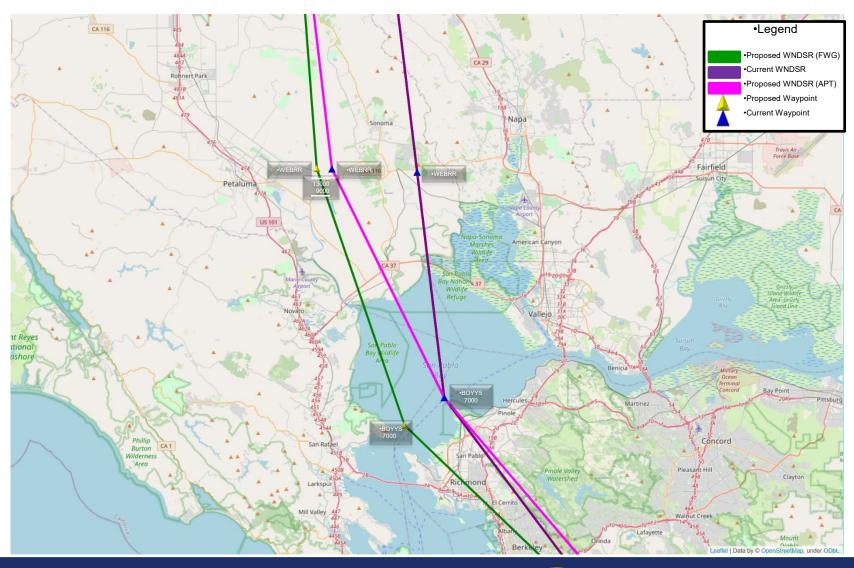
- August 1 - 7, 2019

## WNDSR & Pre-WNDSR Arrivals



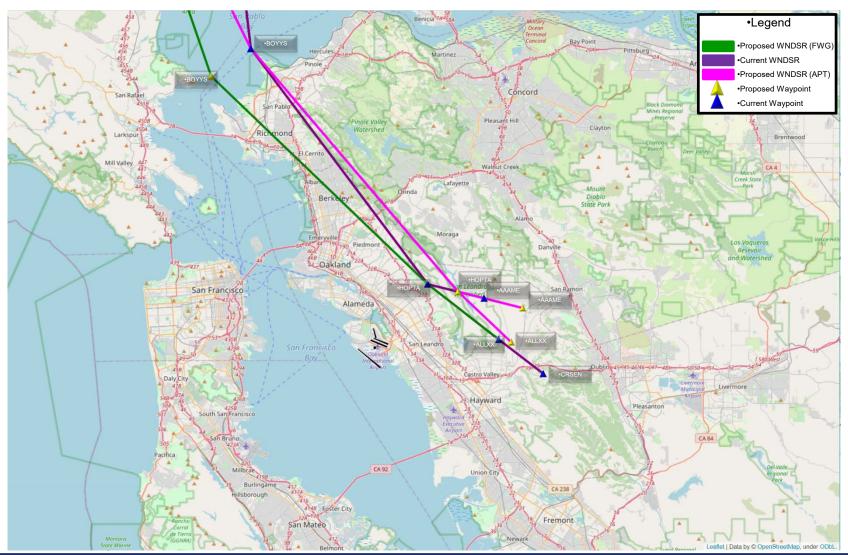


## WEBRR to BOTYS





## BOYYS to HOPTA, ALLXX





## Richmond speaks out against proposed flight path over city

The Richmond Standard, July 16, 2020

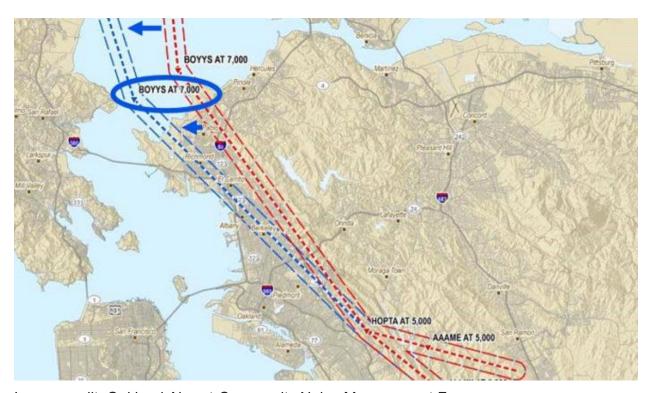


Image credit: Oakland Airport-Community Noise Management Forum

#### **By Mike Kinney**

The Richmond community is speaking out over a proposed change in a flight path into Oakland International Airport that will increase air traffic and noise in the city.

The Federal Aviation Administration (FAA) aims to shift an existing flight path that travels over the eastern edge of West Contra Costa cities two miles west to an area with nearly double the population in Richmond, El Cerrito and Berkeley. The change could happen in October 2021; the decision is not yet final, according to the FAA.

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"It seems low-income people and existing disadvantaged communities are going to be impacted the most with these new proposals," Richmond Deputy City Manager Shasha Curl said during the Oakland Airport-Community Noise Management Forum meeting Wednesday.

She was joined by Mayor Tom Butt and Contra Costa County Supervisor John Gioia in calling for public outreach and review of the plan.

"Richmond has not been thoughtfully engaged," Curl said.

The proposal to shift the flight path is about safety, according to the FAA. In 2015, the FAA adopted a new WNDSR arrival route to replace the conventional RAIDR procedure. That shifted flight tracks to the north/northeast compared to the previous RAIDR, a spokesperson for the FAA said.

"Shortly after we published the WNDSR, we realized it did not provide the same separation from Oakland departures that the previous RAIDR arrival route did, and a fix was needed," the FAA spokesperson said. "The FAA began designing a proposed amendment to the WNDSR route in 2017."

Shifting flights west would keep aircraft on the arrival route safely separated from Oakland departures, according to the FAA.

Last year, the Oakland Noise Forum requested that the FAA evaluate a smaller shift to the east of the current flight path to take advantage of open space between Berkeley/Piedmont/Montclair and Orinda/Moraga.

That proposal isn't feasible, according to the FAA, "due to a number of factors related to the density and complexity of the local airspace." Terrain is higher to the east, the agency said.

"Additionally, shifting the route east would create a conflict with Hayward Executive Airport departures; increase the complexity in sequencing and spacing involving other Oakland arrivals, San Francisco departures and Napa

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County Airport traffic; and would encroach on Travis Air Force Base airspace," according to the FAA.

At Wednesday's Noise Forum, Richmond leaders and community members asked the FAA to reconsider. Gioia said the flight path proposal should be examined as an equity issue, with an analysis of the air quality and noise pollution impacts.

Added Richmond Mayor Tom Butt, "This is an environmental justice issue and adding noise pollution to other pollution sources already affecting Richmond is just not right. The flight path could be shifted a half a mile west and follow the Bay and affecting almost no one."

The FAA said it has not completed the environmental review for the proposed change, nor made a final decision, and added it would "continue to work through the Oakland Noise Forum on appropriate community engagement for the proposal."

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#### Congress of the United States Washington, DC 20515

January 25, 2021

The Honorable Steve Dickson Administrator Federal Aviation Administration 800 Independence Ave, SW Washington, DC 20591

#### **RE: Proposed NextGen Modifications to the Northern California Metroplex**

Dear Administrator Dickson:

We are writing in regard to the Federal Aviation Administration's (FAA's) intention to make additional Air Traffic Control (ATC) modifications to the Northern California Metroplex, with particular respect to procedures related to the Oakland International Airport (OAK). We understand that the most recently described modifications to the WNDSR Area Navigation (RNAV) procedure could impact the path of certain flights arriving to OAK from the north.

The Port of Oakland notified our offices that since the introduction of the NextGen program in the San Francisco Bay Area in 2015, OAK and other airports throughout the region have received a significant increase in noise-related complaints from our constituents, primarily because of the increased concentration of aircraft activity along certain arrival and departure routes.

OAK leadership and stakeholders affiliated with the Oakland Airport/Community Noise Management Forum ("Noise Forum") were recently notified of the FAA's intention to implement a modification to the WNDSR Standard Terminal Arrival route into OAK. This proposed procedure would apparently shift flights from their current course along the East Bay hills and move them westward to a course that overflies a denser population situated among certain unincorporated areas of West Contra Costa County and the cities of Richmond, El Cerrito, Albany, and Berkeley, among other impacted areas.

The presentation by FAA representatives and discussions on the proposed changes during the July and October 2020 OAK Noise Forum meetings have generated concerns from our constituents. Primarily, it does not appear that that the FAA is conducting a meaningful public outreach and engagement process to inform potentially impacted residents of this proposed change. Additionally, FAA staff have been unable to clearly detail the type of environmental analysis that will be conducted to analyze the impacts of this modification and whether any direct outreach to impacted stakeholders will be initiated as part of that environmental review. In addition, we have concerns about how the proposed changes will affect communities that historically have suffered from environmental injustices – including higher levels of air and noise pollution.

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The FAA Reauthorization Act of 2018 directed the FAA to enhance the Agency's community engagement practices related to airplane noise impacts on communities. We respectfully request that you provide us with information on your agency's efforts related to this matter, that they be consistent with both the spirit and the letter of the Reauthorization Act, and that they include a direct line of communication between our constituents and the FAA about this proposed change. Finally, we ask that you keep our offices informed with any further FAA decisions related to this flight route modification.

Thank you for taking the time to consider our thoughts on this matter. We look forward to your response.

Sincerely,

Barbara Lee

Member of Congress

Mark DeSaulnier

Member of Congress

cc: Raquel Girvin, FAA Western-Pacific Regional Administrator

Bryant L. Francis, Director of Aviation, Port of Oakland

Oakland Airport/Community Noise Management Forum Members