

SUMMARY OF STEP TWO COMMENTS

Public Involvement

In April 2019, the Federal Aviation Administration (FAA) held three public workshops in the Phoenix Metropolitan Area. The workshops were held as part of the community outreach process described in Step Two of the Agreement (Implementation Agreement) reached between the FAA, the City of Phoenix, and certain historic neighborhood associations to implement the decision in *City of Phoenix, Arizona v. Huerta*, 869 F. 3d 963 (D.C. Cir. 2017).

The purpose of the April workshops was to discuss comments received during the public workshops and comment period associated with Step One, provide information about the recent implementation of Step One, and accept any additional comments for the FAA to consider in Step Two. During the workshops, the FAA shared conceptual arrival and eastern departure airspace changes (the conceptual changes) it had developed based on the Step One comments received. The FAA held a 30-day public comment for Step Two, and posted all the workshop materials on the agency's Phoenix community involvement website.

The FAA has completed its review of all public comments related to Step Two. The FAA received numerous comments pertaining to existing noise and air quality issues in the greater Phoenix area. For example, some commenters suggested that Step Two should include procedures designed to address existing noise and air quality issues in Phoenix-area communities. Some commenters suggested that to achieve this, the FAA should design procedures to route aircraft over unpopulated areas. Some commenters noted concerns with airspace changes to satellite airports. Other commenters suggested that departures should be "fanned" or dispersed over wider areas in order to more equitably distribute aircraft noise to communities below the flight paths. Some commenters also suggested that curfews should be placed on aircraft operations to reduce the potential for noise impacts during nighttime hours. Other comments asserted there had been recent changes in the noise environment or increases in air pollution that commenters incorrectly attributed to early implementation of the conceptual airspace changes. (The FAA has not implemented nor proposed implementation of the conceptual changes or any other changes to the Phoenix airspace beyond the revised Western departures implemented in 2018. Any design of a new flight procedure, or amendment to existing flight procedures, must undergo several reviews that include, but are not limited to, environmental, safety and operational analyses.)

The FAA will not be taking further action under Step Two, and has now completed all of its obligations under the Implementation Agreement. Any future actions that the FAA may undertake regarding airspace changes in and around Phoenix will be considered new actions that are unrelated to the Implementation Agreement. This approach is consistent with the Implementation Agreement, which provided that the FAA during Step Two would have sole discretion whether to make any changes to flight procedures that are unrelated to the westbound departures that were at issue in the lawsuit.

Following the conclusion of the Implementation Agreement, the FAA intends to continue the dialogue with local stakeholders about issues that are of interest to them, as we do in communities throughout the United States.

Comment Summaries

Because of the volume of comments, many of which included similar concerns, the FAA prepared responses that provide a comprehensive response to the issues of concern. The responses are intended to provide the public with an overview of the FAA's environmental review process for the revised Western departures as well as the environmental process that would occur if additional changes are proposed at a future date.

Comment Category General Definitions

Below are general definitions that the FAA used to categorize comments. A comment was assigned to a category if there was a direct reference to that category or definition.

Air Quality/Greenhouse Gas Emissions

Comments in this category make reference to airborne pollutants, including greenhouse gases (GHG), and/or claims of breathing issues caused by the introduction or existence of aircraft. The FAA received 90 comments on potential air quality or GHG emissions impacts. Additionally, 23 comments noted concerns on both air quality and GHG emissions. Some commenters wanted to know whether any new airspace change, if implemented, would result in the exceedance of one or more of the National Ambient Air Quality Standards (NAAQS) established by the Environmental Protection Agency (EPA). Some commenters also referred to pollutants directly related to jet exhaust, including soot, fuel (either visible residue or vapor odor), etc. and wanted more information on the level of GHG emissions and what potential harm could be caused by these impacts, including on global climate change.

Examples of comments related to this category:

“LOUD Flights depart PHX west flow heading south and then East. They are especially noisy at night. Air traffic arriving from the East disturbs wild life and air quality at Phoenix South Mountain Park. They are especially noisy on ‘no motor vehicle’” days and after dark. At the summits some large aircrafts do not seem high enough.”

“We have noticed since the flight paths have been changed excessive noise and we can see the air pollution which will fall onto the Sonoran preserve and effect plant life also.”

“I am an enrolled member of the Salt River Pima-Maricopa Indian tribe and I reside on the Salt-River Indian Reservation. I greatly opposed to the new flight path Concepts (1) and (2) that runs right in the center of our Community between the 101 frwy and Highway 87. The small parcels of reservation land that our O'odham and Piipaash people live on are already affected daily by current air traffic flight plans because we are close to the Sky Harbor Airport. We have a large

percentage of agricultural fields that will be affected by pollution/ toxic fumes and future development of homes that are increasing each year. The Salt River Community also houses various desert animals and bird life that live in the wild which has increased because of the continued development that has disrupted many of these desert species. As we move into the future it is vital that we protect our natural resources in order to provide clean air and safe water. Currently we face a toxic threat with the waste disposal industry specifically landfills that currently pollutes tribal lands. The serious threats posed by these projects will affect our health, environment, culture, traditions and sovereignty. Please take this into consideration. Thank you,”

“Please design your routes for flight over unpopulated land where there is little to no population. The flight patterns have increased over our home. The noise pollution (early to late) was not this bad when we purchased in 1999. The pollutants and breathing issues are bad enough without the emissions from jet exhaust including soot, fuel residue and vapor odor. As flight patterns increase over our homes the value of our home goes down. Not to mention waking us up in the early morning hours or listening to it in the evening when enjoying the wonderful weather here. Please change flight patterns to go over the many unpopulated areas around Phoenix. Be considerate and put yourself in our place. I don't need the bills for cleaning our home from the pollutants or the doctor bills from breathing issues. Thank you for listening.”

“May 23, 2019 To whom it may concern: Thank you for the opportunity to provide input on the potential airspace changes on the eastern side of Phoenix Sky Harbor International Airport. As the Mayor and Vice Mayor of the City of Mesa, we have heard concerns from our residents about the negative impact of increased noise levels and frequency of commercial aircraft in the northern portion our community. This diverse area of Mesa contains historically significant landmarks, many low-income neighborhoods and features some of the city's last agrarian properties. The concerns we have received from residents include: • Increased noise levels and frequency of both arrivals and departures of aircraft. In addition, concerns that the arrivals and departures are occurring at a lower altitude, thereby exacerbating the noise impacts. • Concerns regarding an increase in air pollution and a decrease in air quality due to commercial aircraft flying over nearby homes. Residents believe aircraft should be flying above the mixing level in order to mitigate the negative impacts of airplane exhaust. We support the concept River Corridor path proposed in Step 2. If designed correctly, this path could address the concerns of north Mesa residents and could be used to relieve traffic from the BROAK and FORPE flight paths. Finally, we support the Phoenix Metroplex cities moving forward with plans to develop a Regional Sound Office. This office would be better suited to address local concerns and would help alleviate direct complaints to the FAA. Please do not hesitate to contact us with any questions. Thank you again for the opportunity to communicate our concerns. Sincerely,”

Biological

Comments in this category reference wildlife and/or habitats. The FAA received 33 comments related to biological resources. Some commenters also asked whether a new airspace change, if implemented, could affect endangered or threatened species.

Example of comments related to this category:

“I have lived at my current address since 2000. Plane noise has increased significantly since then. Feedback from this mtg indicates technology has advanced to allow a more consistent path that happens to be closer to my house. My complaints are about arrivals from the west and departures to the west. There is reservation land to the south that is minimally populated. Efforts to drive traffic further south on these routes would result in minimal resistance. The current path is also problematic for South Mountain recreation/wildlife.”

“There is definite increase in air traffic above my home. With this increase of noise I have noticed less wild life in the area. The noise makes it harder for me to hear when conversing. This increased traffic has caused a decline in my quality of life and possibly my real estate values. Please reroute Sky Harbor traffic to a less populated area. Thanks for listening to the Public.”

“Please restore the Scottsdale Airport routes to what they were before these changes. We have lived in Scottsdale, for 42 years. We have lived in our house currently for 20 years come this December. We know what it was like: peaceful, animals, no noise back here. And we thought the mountains surrounding us would keep it this way. The planes used to come in over Pima Road or west of it. Now they are flying east of Pima and are scaring away the wildlife like mule deer, javalina, coyotes that existed in the preserve. They are called "Air Taxis" I think to run around the prohibition on commercial airlines. They are Citation jets and other planes and they fly low past Pinnacle Peak Mountain on the east side to make their approach. Please preserve the peace of the people and wildlife of North Scottsdale and move these approach corridors west again. Thank you.”

“We moved a major horse operation rescue facility to this area five years ago because there are very few places left in county where we can operate in a quiet horse community. I am concerned because low flying planes in the area below safety levels are a constant stressor to the mustangs we rescue and adding high noise levels will further create issues. I cannot move my operation easily and frankly there are not alot of places left to go to in maricopa county that are designated equestrian. I also worry about the abundant wildlife in the area. Keeping the planes at 10000 feet or above for commercial traffic would be essential but high volumes even at that agl could become problematic. I would like pre 2014 flight paths to be honored.”

“Please don't send aircraft over the Phoenix Mountain Preserve. It's very disturbing to the wildlife that live there. It's bad enough we've encroached on almost all their available land.”

Environmental Justice

Comments in this category make references and/or claims that a new action may place flight paths or aircraft over low-income or minority neighborhoods. The FAA received 36 comments on potential environmental justice impacts, including more information on the location of environmental justice communities in the area.

Most of the comments received were of template responses, examples of which are below:

“Laveen used to be a quiet peaceful city. I now have low flying aircraft directly over my house every 30 seconds from sun up to sun down. We can't sleep until 12:30 to 1 am due to the noise inside our home. It is not okay to do this to south Phoenix just because the people are poorer in this area. Try directing them north across Paradise Valley and see what kind of response you get. This is discrimination at its finest. Put it back the way it was.”

To those stemmed members of the FAA. We live on the edge of the largest city park which is also a preserve in the United States. When the previous flight changes took place, the impact to our life was tremendous. The flight path was right over our home. we were one of the two main paths. Due to the altitude on take off, path and the series of mountains that surround this area, we could no longer spend time outside our home (we have 1.2 acres), we could not keep windows open due to noise and finally, I was in constant fear that a plane was crashing as the reverberation between the mountains causes a noise similar to a plane about to crash. This was how we felt. I was always taught to not complain about a situation but offer a solution in this case that would be fair and equitable. 1. An airport serves the entire community. 2. That same community should share in the noise of the airport with a broad flight path for takeoff and landing. (I have been here 19 years and understand some flights may take off over our home but this burden should not be shared by a few but by the community). 3. When you look at the changes, it is much easier for our elected officials or Departments of the Government to treat all equally. the Flight plan seems to take advantage of the poor side of town and avoid the more affluent. 4. During my 19 years in the valley, we have approached and taken off in almost every direction except Paradise Valley and Scottsdale. this would support that the rich and affluent zip codes should not bear the burden of a service they use more than those neighborhoods bearing the brunt of the noise and issues with take off and landing. 5. Since the stay of flight paths recently in the FAA and City stepping in to reevaluate, thought we do have some days with high traffic, it is not every day. 6. If you truly have integrity and believe in being transparent, we invite you to our home to experience the sound impact as a plane takes off over our home. we do not expect to be eliminated from the flight plan but to simply share the burden with our community. 7. The reasons provided by the FAA simply do not add up. I have review past and present flight plans. You can see clearly that the possibility of sharing the burden is possible but the choice of placing the burden on those who "Cannot Fight City Hall" and do not have the means to stand up and log their voice. Most of these individuals in these areas can barely put food on the table let alone take time away from their jobs and family to attend countless meetings (or even have a computer and internet access to log their opinions). Our Constitutional Moral Compass should be the guide that a shared community resource like Sky Harbor (and its negative ramifications) equally. Thank you for allowing me the opportunity to voice my experience and opinion. I urge you to experience first hand the impact and fear of consolidation of flight paths and the large impact of planes flying over our homes constantly. Thank you

Noise

These comments referenced noise impacts related to aircraft that are either preexisting, or were expected to occur with the implementation of any new airspace changes. Noise impacts made up

the highest number of comments on any impact category. This is normally the case for air traffic procedure changes or runway projects. The FAA received 794 comments on noise.

Examples of comments related to this category:

“The current pattern coming from the east going west has increased the noise level significantly. I live next to South Mountain Park near the North End. Fortunately, living close to the South Mountain Park the flight pattern has to stay away from the mountain to avoid collision. I would like the flight pattern to return to what it was in 1991.”

“I have lived at my current address since 2000. Plane noise has increased significantly since then. Feedback from this mtg indicates technology has advanced to allow a more consistent path that happens to be closer to my house. My complaints are about arrivals from the west and departures to the west. There is reservation land to the south that is minimally populated. Efforts to drive traffic further south on these routes would result in minimal resistance. The current path is also problematic for South Mountain recreation/wildlife.”

“I will never support moving arrival flight paths back over downtown Phoenix where the density and intensity of development is the highest in the state. It is not safe for people in the air or on the ground if a pilot needs to ditch. I am tired of the noise from airliners and do not want more. I do not care about airline profit margins at the expense of the use and enjoyment of Phoenix residence on the ground. Do your job for a change FAA!!”

“I want to share my thoughts on the noise in my neighborhood from sky harbor airport traffic. At times, it is absolutely deafening. I have spoken with the airport complaint line multiple times, sent multiple emails, all with minimal response. The message communicated to me is that I am out of the noise zone, and that there’s nothing they can do. I believe there is a solution, and I would like very much to work together and figure it out.”

“Extremely Loud departures and arrivals, please change the flight path.”

“We are very concerned about the increased noise from planes over our house. It is very loud inside our house and it is hard to enjoy being on our patio.”

National Historic Preservation Act (NHPA) Section 106

Comments in this category reference a specific resource or location that may require special consideration under Section 106 of the NHPA (i.e., historic or culturally significant properties). There were 133 comments related to consideration of the potential future impacts on historic properties that might result from any new airspace change. These issues included how aircraft noise might affect historic properties. Most of these comments were regarding the two concepts that were presented at the April 2019 workshops.

Example of comments related to this category:

“I wanted to express my happiness with the Step 1 changes that reverted the westerly departures back to the 2014 route and eliminated the Grand Ave flight path. I live in a historic neighborhood

near downtown Phoenix and it is great having peace and quiet restored to our neighborhood. We appreciate the FAA's willingness to work with the historic neighborhoods and City of Phoenix."

"I strongly support the Step One changes, and recommend that they be implemented permanently. Our historic neighborhoods have now returned to civility, and we can resume life as it has been there for almost 100 years. The positive environmental impact of these changes for residents of the City of Phoenix has been wonderful."

"As a resident of one of Phoenix's historic neighborhoods (Encanto-Palmcroft) I wanted to take this opportunity to reaffirm my support for the Step 1 changes and its elimination of the Grand Ave flight path. Thank you for listening to us!"

"Grand Ave. flight path should never be reinstated and any solutions for addressing aircraft noise in other parts of the City must not include rerouting any arrivals or departures over Phoenix's historic districts. We don't want a repeat of the previous battle with the FAA with significant cost to the Historic Neighborhoods."

"I operate a history museum in northern Mesa and I am concerned with SCANA's proposal to move MR. BILL and QUAKY over north Mesa. This area of Mesa used to be its own city, Lehi, and it still operates as its own distinct community. It is a very old fashioned area where people still ride their horses down the road. They will not respond well to the disturbance and noise of more air traffic. There has already been slightly more airplane traffic in the area and at community meetings people have been expressing their fury at this increased noise traffic in their quiet and quaint neighborhoods. Not only that, but this area is very important to the history of Mesa as the original settlers settled in this spot. This area has significant historic value and even more air traffic noise would diminish our efforts to try and showcase to students and adults alike a simpler time."

Performance of Step One

This category consists of comments that reference the changes that were made in early 2018 to the revised Western departures, as part of the Implementation Agreement. The FAA received 56 comments for this category.

Examples of comments related to this category:

"I live in Encanto-Palmcroft. When the flight patterns changed and planes were flying over my house all the time, there was a material and adverse effect on my quality of life in my home. It negatively affected my ability to enjoy my home, read, work, sleep, entertain and use outdoor spaces. Walking the dogs under constant flight noise was terrible. The changes to the flight patterns in May 2018 were a very welcome. I strongly urge the FAA to NOT reinstate flights over my neighborhood."

"I support the reversion of the westerly departures that approximate those before Sept 2014, eliminating the Grand Ave flight path. I appreciate the expeditious completion of 'Step 1' in

May, 2018. I OPPOSE any changes that would bring air traffic back over our historic neighborhoods, including any potential adjustments in 'Step 2.'”

“I strongly support your return to the westerly departure routes that were in place in Phoenix before your ill-advised 2014 changes. With the elimination of the Grand Avenue flight path, peace has returned to many neighborhoods that had been forced to endure roaring, low-flying jetliners as they turned north long before gaining enough altitude to avoid major disruptions to the quality of lives below. I appreciate the measures you took as part of Step 1 to stop the noise, and I strongly oppose any further changes that would send jetliners over neighborhoods again. Residents need peace and quiet in their homes. It's a precious thing that helps regenerate the body and soul. Don't take it away again. Please do the right thing this time and leave things alone. Thanks for your consideration.”

“I live in the Willo Historic in Central Phoenix. My neighborhood was one of the petitioners in the Phoenix vs. FAA lawsuit. I came to tonight's workshop to express my support for the Step One process that returned the NW departures to the previous route. The Grand Avenue flight path was ill-advised and devastating for our community. Once the lawsuit was settled, I have to commend the FAA for moving forward with the flight path changes of 3/29/18. Due to the negative impacts and public backlash any effort to reinstitute the Grand Avenue flight path would be HIGHLY CONTROVERSIAL - to say the least. When I look at the FAA NextGen scorecard for PHX - it looks like no efficiencies were gained - and after so much suffering by our community, that is hard to accept. Please maintain the current NW departures and give some relief to the rest of the city of Phoenix and Scottsdale in Step Two.”

Airspace changes since 2014

This category consists of comments or a portion of a comment that reference changes made in 2014 that were not related to the western departure routes addressed in Step One. The FAA received 104 comments for this category.

Examples of comments related to this category:

“The 2014 flight path change for east flow departures has resulted in 200-300 planes per day flying directly over my home. The noise is unbearable. I am extremely frustrated that the FAA can arbitrarily build an airplane super highway over my neighborhood. Most of this air traffic was previously over the McDowell Mtn preserve. If you are going to concentrate the traffic, some effort should be made to minimize the # of homes in the flight path. I would like to see the flight path for east flow departures shifted further east over the uninhabited preserve (where they were for decades).”

“I am a resident of Sandflower, a Scottsdale community located north and east of Sky Harbor Airport. I am concerned about increased risk to public safety due to Sky Harbor NextGen flight paths taking place over far more densely populated areas. The FAA must make changes for eastbound departure routes from Sky Harbor Airport to lessen the negative impact on eastern communities resulting from the 2014 flight path changes. I have filed hundreds of noise

complaints due to Sky Harbor departures. I am impacted by westbound and eastbound departures. I am asking the FAA to consider changes that could be made to increase safety and lessen the impact on people experiencing flight traffic over their homes that never had it prior to Next Gen. Can you consider: Moving the northeast-bound flight patterns just a few miles to the east would to fly over primarily unpopulated areas? A crash would certainly kill people on the ground with the new routes. Consider the noise impact of an airline superhighway over your home. The flight paths are too dense. Remember, our home is getting hit from West and Eastbound flights. Please space them out • Climbing altitudes East flow are too low especially compared to Westflow where they have to fly out farther and climb more in accordance with your lawsuit with phoenix being settled. They must be raised especially over more populated and higher land elevations in north Scottsdale and Carefree where my elevation is 2400 feet. Consider sort of noise abatement like what you do in Orange County.”

“To the FAA, I am a 14 year resident of Glen Eagle at Desert Ridge located in Northeast Phoenix. When I purchased my home in March of 2005 I was aware of the various random noise around me including occasional random jet departures from Scottsdale Airport. I am also an airline pilot so I have a good understanding of the flight path changes at Skyharbor Airport. When the FAA changed the flight paths in Sep 2014 the MAIER 5 arrival was changed to the BRUSR 1 arrival which, when Skyharbor is landing west, moved the flight path 7 degrees to the East from BRUSR intersection putting the new BRUSR1 flight path directly over my house and all of Desert Ridge when Skyharbor is in a westerly operation. The aircraft are approximately 6500 ft agl when they arrive causing significant, unrelenting and distressing noise over my house and my community even when indoors. When Skyharbor is in a westerly operation and the bank of flights are arriving the flights pass over my house and community approximately every 35 seconds for at least an hour until the next bank of flights arrive approximately about an hour later. When the banks arrive overhead the noise is not random, but constant and unrelenting. This has taken away significant enjoyment living at my home. The weather pattern in the Phoenix area is such that most mornings the wind is from the East and most early afternoons and evening the winds are from the West. So most mornings Skyharbor is in an East operation and most afternoon and evenings Skyharbor is in a West operation. So the noise starts nearly every early afternoon and continues until the end of the last bank around 11 pm. Occasionally Skyharbor is in a West operation from morning to night in which the unrelenting noise becomes almost unbearable. So moving the flight path 7 degrees East now puts the flight path over significant hundreds of thousand of residents who never had to endure such noise from all the way North to Tatum Highlands area to Desert Ridge to N Scottsdale to McCormick Ranch and other communities. The new flight paths appear to have impacted the Scottsdale airport flight departures causing additional disturbing noise levels over Desert Ridge. On top of that the new LALUZ 5 departure puts departing flights to the NE, when in a westerly operation, also directly over Desert Ridge and my house, albeit at a higher and less noisy altitude. So the new BRUSR 1 combined with the new Scottsdale Airport departures and the LALUZ5 have added significant amount of new and unrelenting noise! I understand Nextgen and the airlines desire to increase efficiency and also lessen the impact on the environment, but at what significant cost to citizens below and the impact of their quality of life that has been taken away? The noise is so significant that if dining out at Desert Ridge Marketplce it’s significantly too noisy to enjoy dining outside

because the noise is so unrelenting. I think it is fair that I can live with the random noise I agreed to when I purchased my home, but I think it is terribly wrong to add this significant and unrelenting noise to such a large impacted area for what is likely fairly insignificant fuel saving. Again being an airline pilot gives me a good perspective and understanding of the changes. It appears to me that the only arrival flight path that has changed into Skyharbor is the BRUSR1. And I can't believe that changing from the MAIER5 to the BRUSR1 can show all of that much of a fuel savings. My point being that changing this one arrival cannot be all that much of a savings that it can be justified in significantly reducing the quality of life of thousand of citizens below. I would request an economic impact from the above changed arrival vs the impact of how many additional citizens below. In this letter, as a very concerned citizen of Desert Ridge, I am petitioning the FAA to cancel and prohibit the use of the BRUSR1 when Skyharbor is in a West operation and go back to the MAIER5, or some other such new arrival that would solve this problem. Thank you,"

Other

This category consists of comments or a portion of a comment that did not fall into any of the other categories, with respect to Step Two. The FAA received 280 comments for this category.

Examples of comments related to this category:

"Switch flight path every year."

"Air traffic appears to have shifted south from earlier routes."

"Our concerns relate to the possible effects on the Scottsdale Airport. When the flight patterns are finalized what can we expect the changes might be to Scottsdale Airport and Deer Valley?"

"We are effected by arrivals to Scottsdale Airport, particularly on Fridays + Sundays (even moreso when special events such as Phoenix Open, car shows, etc). Military aircraft landing & departing from Scottsdale Airport are particularly noisy. Can flight paths arriving + departing from Scottsdale Airport be changed?"

"My concerns relate to private aircraft, mostly student pilots, practicing and/or receiving instruction over the Rio Verde Foothills / McDowell Mtn Regional Park area. These flights are constant and flying in erratic patterns, constantly changing altitude, doing stalls, etc. I raise, reed, train & show Arabian Horses. These flights are disturbing to me and occasionally to my horses. Scottsdale is the worldwide center of the Arabian Horse. The revenue generated from this breed is substantial to Arizona & Scottsdale. The Arabian Farms have moved or are in the process of moving from the Cactus Rd. area to the Rio Verde Foothills. Is this area (Rio Verde Foothills/McDowell Mtn Regional Part the only area where these flights from Scottsdale and Deer Valley airports can fly for training? My comments include helicopter flights as well as fixed wing aircraft."

Conceptual Airspace Changes

Comments in this category reference either of the two conceptual airspace changes (Concept One and Concept Two) that the FAA presented at the Step Two workshops. A total of 352 comments were received on this topic.

On Concept One, we received a total of 133 comments as categorized below:

- 18 comments in support of the concept
- 92 comments in support of the concept if modifications are made
- 18 comments against
- 5 comments neither for or against

On Concept Two, we received a total of 219 comments as categorized below:

- 67 comments in support of the concept
- 8 comments in support of concept if modifications are made
- 138 comments against
- 6 comments neither for or against

The FAA will not be taking further action under Step Two related to Concept One or Concept Two.

Examples of comments related to this category:

“NICE PRESENTATION & VERY HELPFUL, INFORMATIVE FAA STAFF. CONCEPT 1 & CONCEPT 2, AS SHOWN, WOULD/SHOULD GREATLY REDUCE THE AMOUNT OF NOISE AND OF PLANES CRISSCROSSING OVER MY HOME. ALL WAS FINE BEFORE NEXTGEN. THANKYOU”

“UNLESS I'M READING THE MAPS INCORRECTLY, THE OUTBOUND FLIGHT PATH CURRENTLY GOES RIGHT OVER ME - AND IT'S NOT A BIG CONCERN SO IF SOME OF THE OUTBOUND FLIGHTS ARE MOVED EAST TO CONCEPT 2, I THINK IT WILL ONLY IMPROVE THE SITUATION. SO I AM IN FAVOR OF OUTBOUND CONCEPT 2. HOWEVER, INBOUND CONCEPT 2 GIVES ME CAUSE FOR CONCERN BECAUSE I APPEAR TO BE RIGHT IN THE NON PATH. HOPEFULLY IT WON'T BE TOO BAD BECASUE INBOUND FLIGHTS AREN'T TOO LOUD. THANKS FOR MAKING THIS FORUM AVAILABLE TO THE PUBLIC.”

“Concept 1 - 30% is not enough to alleviate the noise which McDowell Mountain Ranch endures. Please consider 40%-50%. Concept 2: - If the North orange live can be lowered more, not to impact McDowell Mtn Ranch area, then we would greatly appreciate it. Thank you for listening.”

"I am 100% against Concept 1. This "proposal", directly places aircraft over the Rio Verde area, which, I noticed has the largest proliferation of complaints. Concept 2, does not impact as many populated areas. Environmentally: the Harris Hawk, is indigenous to the Verde Valley. The (unreadable) protected under the migratory Bird Act. (16 USC, 703-711) "It is illegal to harass or hunt". These birds frequently ride thermals up to 2500'AGL. This proposal (Concept 1) would harass these birds. The Rio verde area is home to hundreds of equestrian operations. Aircraft noise and physical size are a direct threat to the safety and well being of both horses and riders. Economically: Concept 1, will have an immediate negative impact on property values in our area. People are already dubious of looking in our area for property, since this process started. Further continuation of "Concept 1," will lead years of costly litigation for both FAA, PHX, SCL and current property owners. Small aircraft: our valley is currently being victimized hundreds a time per day by countless flight schools. The Tonto National Forrest is 100 yards north of my equine facility. This offers 56k acres for them to conduct their disruptive maneuvers."

"Would not like the proposed flight path approved"

"We oppose the new flight path proposal. When purchasing our home in Troon North we performed significant due diligence specific to airline flight path considerations and eliminated any housing option close to any routes for any airports. To now find ourselves in this scenario is really quite frustrating. Housing values, ability to sell the homes, etc. will be impacted; who will compensate us for that impact? Folks are drawn to this area in part for it's quiet conditions. We can't reverse that environment as a result of this proposal. Please reconsider."

"I am NOT in support of the new proposed routes for planes. Their route goes from Scottsdale to downtown Phoenix and disturbs many established neighborhoods."

"I say go ahead and do it. Remember it was that Steve D (cant spell his last name) that stuck his head in on getting it change here while back. So please go with it. Remember airplanes have to fly. Your the boss. So yes my vote is do it do it do it"

"As a resident of North Scottsdale, I would like the FAA to move the flight paths further east and south of the McDowell Mountains . I have seen the proposed maps identified in the PDF as Concept 1 and Concept 2. I support both of those and ask that the FAA adopt both of those revised flight paths. Thank you."

"This household supports the two conceptual modifications to flight paths over McDowell Mountain Ranch the FFA has proposed. Concept one and concept 2 would improve safety as well as noise issues over our community."

"If you are doing flight modifications, PLEASE consider Modification FAA Concept #1 where flights will travel to the Far to the East of Scottsdale and McDowell Y Nation. Please do not use Concept #2 which would have the planes fly directly over Scottsdale Ranch which is densely populated and everyone is sleeping at night. At least when flying over downtown Scottsdale, downtown is a busy area so the noise is less noticeable than really quiet Scottsdale Ranch (Via Lynda and E Mountain View area). Thank you so much."

“We appreciate that the FAA is considering public input on the PHX NexGen flight paths. We have reviewed the FAA concepts presented at the public meetings and the associated JDA Aviation report. Based upon that review, we support the FAA Concept One departure route changes, along with Scottsdale recommended modifications to Concept One. However, we are opposed to the FAA Concept Two arrival changes for several reasons. In the near term, it appears that these changes would increase the total population impacted by arrivals by over 200,000. In addition, it would increase the noise impact of the departure routes which must fly lower under the new Concept Two arrival routes. Over time, splitting the existing EAGUL arrival route would likely lead to greater overall traffic impact to the 560,000 people living near these two new Concept Two routes.”

“Good Afternoon This comment is meant to supplement my previously submitted comments. As previously noted, I support the City of Scottsdale modification to Concept 1. The FAA proposed changes do not provide sufficient relief. Concept 2: Concept 2 as proposed would result in increased traffic over heavily populated areas in Scottsdale, more than 2X the impact of the current EAGUL path (according to JDA study by Scottsdale). The northern branch of concept 2 as proposed is an area that already has a significant amount of air traffic noise, including a significant amount of departures when the airport is operating to the west (flights turn early and overly fly Scottsdale when headed east), a large volume of Scottsdale traffic, and traffic from inbound Phoenix when the airport is operating to the West. These paths impact my area more than the area you are considering moving Concept 2 from, so the plan would effectively make the noise even worse in an area that is already noisier, and that has a much larger population. In addition, my area gets a large volume of outbound traffic when the airport is operating to the East. This traffic is extremely loud, and by moving EAGUL south, you'd be creating an intersection over a very heavily populated area. I would ask you to please consider solutions for the EAGUL path that could achieve the FAA goal of enhanced efficiency, while cutting down noise to all of Scottsdale. Your current plan would make a bad problem worse and result in a new group of people getting a significant amount of new traffic over them. I firmly believe there are actual solutions that can achieve the goal of enhanced efficiency while reducing noise to all of Scottsdale. Solutions could include: (i) pushing both proposed EAGUL paths south over the reservation; (ii) keeping the current EAGUL path supplemented with the far south inbound path to cut down on traffic on the current route, while not putting more traffic over an area that already bears a significant noise burden; or (iii) push the entire inbound path concept well north of the current path, over areas in and around Carefree. Much less population in that area and you could achieve the exact same results and ensure much less traffic over Metro Phoenix, while increasing safety. This farther north shift would also allow departing flights to the East to climb higher and not be capped at their current low elevation. In closing I would ask that you please try to come up with solutions that balance FAA goals with helping reduce noise to our entire community, and not to simply shift the noise burden from one area to another. Thank you for your consideration.”

“Support preferred modification concept 1 for eastbound flights Leave concept 2 as is”

“I am in complete support of the proposed changes to the flight patterns at phx sky harbor airport”

“We already have significant noise pollution from Scottsdale Airport. We strongly support the Preferred Modification to the FAA proposed Concept 1 for eastbound flights at Sky Harbor, and

Concept 2 as is. We hope this can be accommodated without any legislative action required. Thank you for your understanding and consideration.”

“I’ve been a home owner in DC Ranch 12 years and I purchased my home here before the airplane superhighway was “arbitrarily and capriciously” placed over our neighborhood without our knowledge or input. Safety and noise are a huge concern. The flight pattern changes from Sky Harbor have greatly impacted air traffic over our community emanating from Scottsdale Airport. I support the FAA's Concept Two to diversify the eastern arrival path into two separate paths. While FAA Concept One is a move in the right direction, it does not solve the noise and safety issues of the northeast valley. The end result must be the restoration of the environment to pre-NextGen levels that existed in 2014. I also support the City of Scottsdale's proposed Preferred Modification to move the remaining flight path to the FAA's Concept One route.”

“AFTER ATTENDING YOUR MEETING LAST NIGHT AT PINNACLE HIGH SCHOOL AND SPEAKING WITH VARIOUS FAA REPRESENTATIVES PRESENT, AS WELL AS STUDYING YOUR VARIOUS DISPLAYS, HERE ARE OUR COMMENTS: CONCEPT 1 IS A GOOD IDEA FOR NORTH-EAST DEPARTURES; CONCEPT 2, DESIGN 2 WHICH COVERS PROPOSALS FOR EASTERN FLOW ARRIVALS WOULD BE VERY BAD FOR THE HOMES UNDER THE FLIGHTS PATH. THESE COMMUNITIES INCLUDE MCDOWELL MOUNTAIN RANCH WITH 3,884 HOMES. WE ASKED QUESTIONS ABOUT THE ALTITUDE OF THE PLANES IN REGARD TO DEPARTURES AND ARRIVALS, AND NO REPRESENTATIVE PRESENT COULD PROVIDE US WITH SPECIFIC ANSWERS. WE WERE DISTRESSED BY RECEIVING NOTHING BUT VAGUE ANSWERS.”

FAA Responses to Comments

These responses provide an overview of the FAA’s environmental review process for each of the resource categories identified by members of the public. It is important to note that the FAA already completed its environmental review process for the Area Navigation (RNAV) Standard Instrument Departure (SID) Procedures that depart to the west at PHX. Those procedures were implemented during Step One of the Implementation Agreement in March and May of 2018. For reference, the environmental review for those procedures is available at the following web page: https://www.faa.gov/nextgen/nextgen_near_you/community_involvement/phx/.

As part of Step Two of the Implementation Agreement, the FAA also committed to consider feedback on procedures throughout the greater Phoenix area.

Response for Air Quality/GHG Emissions Comments

Any airspace or procedure change proposed would be subject to the FAA’s environmental review process, which includes consideration of air quality impacts and would discuss the existing air quality conditions and possible impacts from any future study area.

Typically, significant air quality impacts would be identified if an action resulted in the exceedance of one or more of the National Ambient Air Quality Standards (NAAQS), established by the Environmental Protection Agency (EPA), for any time period analyzed. According to FAA Order 1050.1F, Exhibit 4-1, an emissions impact is significant if “[t]he action would cause pollutant concentrations to exceed one or more of the NAAQS, as established by the EPA under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.”

Section 176(c) (commonly referred to as the General Conformity Rule), of the Clean Air Act (CAA) requires that federal actions conform to the appropriate State Implementation Plan (SIP) in order to attain the air quality goals identified in the CAA. A conformity determination is not required if the emissions caused by a federal action would be less than the *de minimis* levels established in regulations issued by EPA. FAA Order 1050.1F provides that further analysis for National Environmental Policy Act (NEPA) purposes is normally not required where emissions do not exceed the EPA’s *de minimis* thresholds. The EPA regulations identify certain actions that would not exceed these thresholds. These include air traffic control activities and adoption of approach, departure, and en route procedures for aircraft operations above the inversion base for pollutant containment (commonly referred to as the “mixing height”) specified in the applicable SIP (or 3,000 feet Above Ground Level [AGL] in places without an established mixing height). In addition, the EPA regulations allow federal agencies to identify specific actions as “presumed to conform” (PTC) to the applicable SIP.

In a notice published in the Federal Register, the FAA has identified several actions that “will not exceed the applicable *de minimis* emissions levels” and, therefore, are presumed to conform. These include air traffic control activities and adoption of approach, departure, and en route procedures for air operations.¹ The FAA’s PTC notice explains that aircraft emissions above the mixing height do not have an effect on pollution concentrations at ground level. The notice also states that changes in air traffic procedures above 1,500 feet AGL and below the mixing height “would have little if any effect on emissions and ground concentrations.”²

With regard to GHG emissions, any airspace or procedure change proposed would be subject to the FAA’s environmental review process. Because the FAA is not proposing any new changes at this time, the FAA is not presenting any new analysis. GHG are naturally-occurring and man-made gases that trap heat in the earth’s atmosphere. The potential effects of GHG emissions are by nature global and cumulative impacts. An appreciable impact on global climate change would only occur when GHG emissions combine with GHG emissions from other human-made activities on a global scale. According to the EPA, the General Accounting Office (GAO) in 2009 reported that domestic aviation contributed approximately three percent of total national carbon dioxide (CO₂) emissions. Similarly, in its 2010 Environmental Report, the International Civil Aviation Organization (ICAO) estimated that aviation accounted for approximately three percent of all global CO₂ emissions

¹ Federal Presumed to Conform Actions under General Conformity, 72 Fed. Reg. 41565 (July 30, 2007).

² *Id.*

resulting from human activity. The FAA considers CO₂ emissions from aircraft to be the primary GHG of concern.

The estimated level of GHG emissions can serve as a reasonable proxy for assessing potential climate change impacts. However, there are currently no accepted methods of determining significance applicable to aviation projects given the small percentage of emissions they contribute, nor has the FAA identified specific factors to consider in making a significance determination for GHG emissions.

Response for Biological Resources Comments

Any airspace or procedure change would be subject to the FAA's environmental review process including consideration of biological resources. The Endangered Species Act (ESA) directs all Federal agencies to work to conserve endangered and threatened species and to use their authorities to further the purposes of the Act. Airspace and/or flight routes actions do not entail any ground-based development that could destroy or modify critical habitat for any protected fish, wildlife or plant species.

Response for Environmental Justice Comments

Any airspace or procedure change would be subject to the FAA's environmental review process, which includes consideration of impacts to environmental justice populations. An environmental justice analysis considers the potential of a change to cause disproportionately high and adverse effects³ on low-income or minority populations and takes into account possible significant impacts in other environmental impact categories. Analysis of impact categories (such as air quality, noise, hazardous materials, and water quality) is completed to determine if implementation of an action would exceed applicable thresholds of significance. The FAA would analyze a project study area using the Aviation Environmental Design Tool (AEDT) Environmental Justice module to identify these populations in the vicinity of PHX. The AEDT Environmental Justice module relies on U.S. Census demographic data to identify communities that may be candidates for meaningful involvement in project communication and/or outreach activities. The intent of this analysis is to identify potential populations based on readily available U.S. Census data using standard techniques to determine whether adverse direct or indirect effects would disproportionately affect any environmental justice populations within a project study area under any new airspace change.

³ "Adverse effects" means the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects. DOT Order 5610.2(a) provides the definition for the types of adverse impacts that should be considered when assessing impacts to environmental justice populations.

Response for Noise and Noise-Compatible Land Use Comments

The FAA received numerous comments about existing aircraft noise. Many of these comments raised longstanding concerns about aircraft noise that commenters hoped would be addressed by Step Two. Other commenters perceived changes in aircraft noise that they attributed to the revised Western departures that the FAA implemented in March and May of 2018 pursuant to Step One of the Implementation Agreement. Other commenters expressed frustration that eastbound departures have not been revised, and were not included as part of Step One. (Eastbound departures were not at issue in the litigation nor were they specifically referenced in the Implementation Agreement. However, the FAA did agree as Part of Step Two to consider recommendations outside the scope of westerly departures.) Of all these comments, the majority could be categorized as noise complaints as opposed to comments on future proposals. This response explains that any future airspace or procedure changes would be subject to the FAA's environmental review process, which includes consideration of noise impacts and land use compatibility.

The noise and noise-compatible land use analysis in an environmental review document discusses information about noise and land-use compatibility criteria applicable to the evaluation of noise impacts. In this analysis, that was similarly completed for the air traffic flight routes implemented under Step One, the FAA determines the compatibility of existing and planned land uses in relation to the level of aircraft noise associated with any actions. The agency does this by comparing the Day-Night Average Sound Level (DNL) values to the land use compatibility guidelines in 14 CFR Part 150 of the Federal Aviation Regulations. Part 150 identifies a DNL level of 65 decibels (dB) and below as compatible with residential and most other uses. The DNL does not measure sound as it occurs in real time but represents noise as it occurs over an averaged 24-hour period, with one important exception: DNL treats noise occurring at night differently from daytime noise. In determining DNL, the metric assumes that the A-weighted decibel noise levels occurring at night (defined as 10 p.m. to 7 a.m.) are 10 dB louder than they actually are. This 10 dB increase is applied to account for the fact that there is a greater sensitivity to nighttime noise and the fact that events at night are often perceived to be more intrusive because nighttime ambient noise is less than daytime ambient noise.

To determine whether aircraft noise impacts are significant under NEPA, the FAA considers whether the predicted increase in noise associated with any new airspace change, if implemented, would exceed defined thresholds of significance. For aircraft noise, that threshold is an increase of DNL 1.5 dB or more for an -area that is exposed to noise at or above the DNL 65 dB exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to a No Action Alternative for the same timeframe.

FAA Order 1050.1F notes that special consideration needs to be given to evaluating the significance of noise impacts on certain noise-sensitive areas, where the land-use compatibility guidelines in 14 CFR Part 150 may not be sufficient to determine the noise impact. These areas include, but are not limited to, noise sensitive areas within national parks; national wildlife and waterfowl refuges; and historic sites, including traditional cultural properties.

As identified in the environmental review for Step One, the noise screening indicated that the Step One procedures would not result in a significant noise impact on land uses covered by the Part 150 noise compatibility guidelines. However, the Step One Proposed Action noise screening scenario when compared to the No Action noise screening scenario identified an area of reportable change in noise of at least DNL 5 dB between the DNL 45 dB to 60 dB noise exposure level approximately 3 nautical miles southwest of PHX. This area of change encompasses approximately 22 square miles, and is roughly defined by West Broadway Road and the Salt River riverbed along the northern edge, South 19th Avenue along the eastern edge, West Carver Road along the western edge, and an agricultural field access road making up the southernmost edge approximately 0.5 nautical miles north of West Elliot Road. Further information on the FAA's noise analysis for Step One is available in the environmental review documentation that accompanied the FAA's Categorical Exclusion. These expected reportable increases were disclosed to the public and considered as part of the FAA's overall environmental review, including the Section 106 review process.

Response for Historical and Cultural Resources Comments

Any future airspace or procedure changes would be subject to the FAA's environmental review process, which includes consideration of resources protected under Section 106 of the National Historic Preservation Act. Section 106 requires the FAA to consider the effects of its proposed undertakings on properties listed or eligible for listing in the National Register of Historic Places (National Register). In assessing whether an undertaking affects such properties, the FAA must consider both direct and indirect effects.

No land acquisition, construction, or other ground disturbance activities would occur under the conceptual airspace and/or flight route change. Therefore, any new airspace change, if implemented, would not directly (i.e., physically) affect any historical, architectural, archaeological, or cultural resources. Indirect effects include changes in the environment of the historic resource that could substantially alter the characteristics that made it eligible for listing on the National Register. The assessment under Section 106 would focus on the potential for indirect adverse effects to historic and cultural resources that may result from changes in air traffic routes, such as aircraft noise and visual impacts. Through consultation with the state, local, and tribal historic preservation offices, the FAA would determine whether such effects would be considered "adverse," i.e., if they diminished the integrity of a property's significant historic features. These features may include its setting, provided the setting has been identified as a contributing factor to the property's historic significance.

Response for Performance of Step One Comments

The FAA implemented nine Standard Instrument Departures (SIDS) per Step One of the Implementation Agreement, which changed the westerly departure procedures (flight path) within 15 miles west of PHX. The FAA did not make any changes to the east flow; moreover,

the RNAV procedures the agency implemented in September 2014 for the satellite airports were not affected.

Step One west-flow departures from PHX now fly the procedure to 43rd avenue, and after 43rd avenue they turn to fly as close as practicable to where they flew prior to the changes made in September 2014, all while maintaining the RNAV benefits as they transition to en route airspace.

After reviewing and analyzing flight track data for aircraft using the Step One procedures, the FAA determined that it successfully met the requirement of approximating, to the extent practicable, the western departure routes that were in place before September 2014.

Response for Airspace Changes since 2014 Comments

On Sept. 18, 2014, the FAA implemented nine Area Navigation (RNAV) Standard Instrument Departures (SIDs) and five RNAV Standard Terminal Arrival Routes for PHX. Additionally, those RNAV SIDs would service seven satellite airports in the greater Phoenix area. Those seven satellite airports are: Phoenix Goodyear Airport (GYR), Glendale Municipal Airport (GEU), Phoenix Deer Valley Municipal Airport (DVT), Scottsdale Municipal Airport (SDL), Falcon Field (FFT), Phoenix Mesa Gateway Airport (IWA) and Chandler Municipal Airport (CHD).

Prior to publication, a noise screening was undertaken with Noise Integrated Routing System Noise Screening Tool for the then-proposed procedures. The noise screening showed that there were no noise-sensitive land uses which would experience a significant noise impact (DNL 1.5 dB increase within the 65 dB noise exposure level) as a result of the implementation of the proposed procedures. It was also found that there were two areas in which there was expected to be a DNL 5 dB or greater increase in the DNL 45 – 60 dB noise exposure level. One area, containing 25 places listed on the National Registry of Historic Places, lays either side of US 60, and the other one lies south of Interstate 10, in the vicinity of 83rd Avenue, both main transportation corridors through central Phoenix. The FAA determined that given the location and degree of noise increase, that the proposed procedures were not likely to be highly controversial on environmental grounds. So the procedures were implemented.

On June 1, 2015, the City of Phoenix and later a number of historic neighborhood groups (together, the “Petitioners”) challenged the FAA’s approval of certain RNAV departure procedures in the U.S. Court of Appeals for the D.C. Circuit (“Court”). On August 29, 2017, the Court ruled in favor of the Petitioners.

In response to the Court’s decision, the FAA and the Petitioners worked together on the best way to implement the Court’s order (See Appendix A: Memorandum). The parties agreed to a two-step process for Phoenix Sky Harbor that ensures aircraft operations remain safe and efficient. Step One of the process included three public workshops in February 2018 and resulted in a phased implementation of the western departure routes (approximating those in place before the 2014 RNAV procedures) beginning in March of 2018 and completed in May of 2018.

Under Step Two, the FAA agreed to consider feedback on procedures throughout the Phoenix area — not just on the westerly departure routes. The FAA received these comments at the May 2019 public workshops and during the 30-day public comment period. The FAA has considered these comments along with the input from Phoenix air traffic control facilities and the users of the Phoenix airspace.

Response for Other Comments

The majority of the comments in this section were general comments on aircraft flight paths and the satellite airports surrounding PHX, along with comments relating to safety of people and property on the ground. The FAA evaluates air traffic procedures from a design, safety, and operational perspective. This includes ensuring that all required safety, environmental, flight inspections, and rulemaking activities are completed. The FAA also conducts a post-implementation review of its procedures and /or routes to verify that the procedure and/or route meets objectives (e.g. efficiency, safety, controller workload, capacity, etc.).

Additionally, in order to handle air traffic demands, the FAA uses runway configurations in accordance with runway selection criteria. The FAA bases runway selection on several factors including runway availability, wind, weather, operational efficiency, and other considerations.

Response for Concept One/Concept Two Airspace Change Comments

Comments regarding Concept One and Concept Two include comments in support of either Concept One and/or Two, against either Concept One and/or Two, and in support of Concept One and/or Two if concept designs are modified. Many of the comments received were in favor of the City of Scottsdale’s proposed modifications to Concept One, which were not part of the FAA’s conceptual designs.

The FAA is responsible for following regulatory and technical guidance for designing airspace and/or flight route changes, as well as meeting criteria and standards in three general categories:

1. Area Navigation (RNAV) Design Criteria and Air Traffic Control Regulatory Requirements - Flight procedure design is subject to requirements found in several FAA Orders and guidance documents, including FAA Order 8260.3C, United States Standard for Terminal Instrument Procedures; FAA Order 8260.58B, United States Standard for Performance Based Navigation Instrument Procedure Design; FAA Order 8260.43B, Flight Procedures Management Program; FAA Order JO 7110.65X, Air Traffic Control; FAA Order JO 7100.41A, Performance Based Navigation Implementation Process and The Guidelines and Updates for Implementing Terminal RNAV Procedures. In addition, FAA Order JO 7110.65X Air Traffic Control includes requirements governing air traffic control procedures, air traffic management, and appropriate technical terminology.

2. Operational Criteria – To the maximum extent possible, Performance Based Navigation (PBN) procedures are developed operationally to ensure aircraft departure and arrival lateral and vertical paths are procedurally separated. Air traffic controllers are responsible for aircraft separation; however, they use PBN procedures to assist with their operational responsibilities at Phoenix Sky Harbor and surrounding airports.

3. Safety Risk Management Criteria - FAA evaluates air traffic procedures using the Air Traffic Organization’s (ATO) Safety Management System (SMS). The SMS is the system for assessing and managing the safety of air traffic control and navigation services in the National Airspace System. If a procedure introduces a new hazard or increases the severity and/or likelihood of an existing hazard, the design is adjusted or mitigated to reduce the hazard to acceptable levels. In compliance with SMS requirements, any new procedures would be evaluated by a Safety Risk Management Panel following a five step process: 1) describe the system; 2) identify the hazards in the system; 3) analyze the risks; 4) assess the risk; and, 5) treat the risk (if any).

In assessing aircraft traffic routes, a safety analysis is completed for multiple considerations in the design and proposed implementation of an air traffic flight route. The overarching consideration is the safety and efficiency of the air traffic operations in the National Airspace System. The safety analysis process is conducted by a team of air traffic controllers that manage the airspace for each of the phases of flight.

Multiple safety considerations and potential concerns are analyzed for each phase of flight. Examples of these safety considerations that were part of the Step One SMS process were:

- Immediate course divergence to improve separation of aircraft
- Lateral separation between successive west configuration departures
- Increase departure throughput during peak traffic periods with a third departure course
- Reductions in ground controller task complexity by simplifying departure gate balancing
- PBN procedures enhance safety by reducing frequency congestion
- Safety and efficiency were improved with repeatable and predictable flight paths

As mentioned above, many of the comments supported a version of Concept One that incorporated modifications proposed by the City of Scottsdale. The City of Scottsdale’s proposed modifications to Concept One were set forth in the “Scottsdale Community, Phoenix Sky Harbor International Airport, Departure Procedure Study.” dated May 17, 2019. The FAA is opposed to the City of Scottsdale’s proposed modifications to Concept One. These proposed modifications to Concept One would cause major safety issues for both air traffic controllers and aircraft within the Phoenix metropolitan area, and would also lead to departure delays out of PHX.

Some of the FAA’s concerns with the proposed modifications to Concept One are:

- Modification to the proposed FAA Concept One as depicted on page 27 of the JDA report directly conflicts with the PHX FORPE ONE DEPARTURE (RNAV) and Victor (V)

airway 190 which are not depicted on their graphic. The PHX FORPE ONE is the single most heavily used departure in our airspace and additional aircraft assigned along that flight path would increase conflicts, reduce safety margins, and reduce airport throughput by adding mile-in-trail restrictions. V-190 is the primary airway for general aviation aircraft to transition from the terminal to the en route environment northeast bound from PHX, DVT, SDL, FFZ, IWA, and CHD. Rapidly rising terrain from PHX NE along V-190 limit controller options for handling those aircraft and any additional conflicts reduce safety margins and increase complexity along that route.

- The additional mileage flown by aircraft on this proposed route translates into higher altitudes prior to turning northbound which increases interactions with inbound aircraft on the EAGUL SIX ARRIVAL near the BOHTX waypoint.
- “Scottsdale’s Acceptable Modification” to FAA Concept One as depicted on page 28 on the JDA report adds PHX QUAKY ONE DEPARTURE (RNAV) to the flight path proposed by FAA for PHX MRBIL DEPARTURE. The additional mileage flown by aircraft on this proposed route translates into higher altitudes prior to turning northbound which increases interactions with inbound aircraft on the EAGUL SIX ARRIVAL near the GEENO waypoint.
- The most likely way to manage this situation is by taking aircraft off the published procedure. However, this adds complexity to pilots and controllers as well as reduces safety margins by eliminating predictability of the flight paths.

The FAA will not be taking further action under Step Two related to the City of Scottsdale’s proposed modifications to Concept One.