FOR PUBLICATION

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

MICHELLE BARNES, an individual; PATRICK CONRY, an individual; BLAINE ACKLEY,

Petitioners,

PORT OF PORTLAND,

Intervenor,

v.

UNITED STATES DEPARTMENT OF TRANSPORTATION; RAY LAHOOD, Secretary of Transportation; FEDERAL AVIATION ADMINISTRATION; J. RANDOLPH BABBITT, Administrator, Federal Aviation Administration; Donna Taylor, Regional Administrator, Federal Aviation Administration, Northwest-Mountain Region; CAROL SUOMI, District Manager, Federal Aviation Administration Seattle Airports District; CAYLA Morgan, Environmental Specialist, Federal Aviation Administration Seattle Airports District,

No. 10-70718 OPINION

On Petition for Review of an Order of the Federal Aviation Administration

Respondents.

Argued and Submitted February 9, 2011—Seattle, Washington

Filed August 25, 2011

16261

Before: Betty B. Fletcher, Richard A. Paez, and Sandra S. Ikuta, Circuit Judges.

Opinion by Judge B. Fletcher; Dissent by Judge Ikuta

COUNSEL

Sean T. Malone and Andrew J. Orahoske, for the petitioners.

Ignacia S. Moreno, Assistant Attorney General; Hans Bjornson and Patricia A. Deem, the Federal Aviation Administration; David C. Shilton and Michael T. Gray, United States Department of Justice, Environment and Natural Resources Division, for the respondents.

Beth S. Ginsberg, Rita V. Latsinova, and Jason T. Morgan, Stoel Rives LLP, for the intervenor.

OPINION

B. FLETCHER, Circuit Judge:

Petitioners Michelle Barnes, Patrick Conry, and Blaine Ackley (collectively, "petitioners") challenge an order of the Federal Aviation Administration ("FAA") concerning the proposed construction by the Port of Portland ("the Port") of a new runway at Hillsboro Airport ("HIO"). The FAA issued a Finding of No Significant Impact ("FONSI"), thus relieving the agency of preparing an Environmental Impact Statement ("EIS"). Petitioners argue that the decision not to prepare an EIS was unreasonable for several reasons, chief among them the FAA's failure to consider the environmental impacts of any increased demand for HIO resulting from the addition of a runway. Petitioners also argue that the FAA did not afford them a public hearing within the meaning of 49 U.S.C. § 47106.

We have jurisdiction pursuant to 49 U.S.C. § 46110. We grant the petition and remand.

BACKGROUND

I. The Hillsboro Airport

HIO is located in the city of Hillsboro in Washington County, Oregon, 12 miles west of downtown Portland. The Port of Portland assumed ownership of HIO in 1966. In 2008, HIO become Oregon's busiest airport, surpassing Portland International Airport (PDX) in number of airport operations.¹

HIO's increasingly important role in the Portland metropolitan area and the Oregon state system of airports is the result of its serving all three segments of the air transportation industry: commercial air carriers, military, and general avia-

¹Airport operations include takeoffs and landings.

tion (GA). Commercial air carrier is broadly defined as any domestic or foreign aircraft carrying passenger or cargo for hire. HIO accommodates a broad range of commercial air carriers, including scheduled air carrier activity using aircraft with nine or fewer passenger seats; air cargo carriers using aircraft with a payload capacity less than 7,500 pounds; ondemand air carriers using aircraft with 30 or fewer passenger seats and a payload capacity of less than 7,500 pounds; and commuter operations with non-turbojet aircraft with nine or fewer passenger seats and a payload capacity of less then 7,500 pounds.² HIO also accommodates local and transient operations by military rotorcraft and occasionally military jet aircraft. Finally, GA is defined as all aviation other than military and commercial airlines. It includes a diverse range of activities such as pilot training, sightseeing, personal flying, agricultural spraying and seeding, fractional business jet operations,³ and emergency medical services. Seventy percent of the hours flown by general aviation are for business purposes.

HIO's role is defined within both state and federal aviation plans. HIO is designated as a reliever airport in FAA's *National Plan of Integrated Airport Systems* (NPIAS). Reliever airports are specially designated to reduce congestion at large commercial service airports by segregating GA aircraft from commercial airlines and air cargo activities. HIO is classified as a reliever for PDX. At the state level, the *Oregon Aviation Plan* prepared by the Oregon Department of Aviation (ODA) classifies HIO as a Category 2, Business or High Activity General Aviation Airport. Neither the NPIAS nor the *Oregon Aviation Plan* anticipate HIO changing from a GA airport to a commercial service airport in the future.

²HIO is not certified to accommodate scheduled air carrier activity using aircraft with more than nine passenger seats. In the area, PDX exclusively is certified to accommodate such activity.

³Fractional business jet operations are the aviation equivalent of real estate time shares.

II. Hillsboro Airport Master Plan

In 2005, the Port of Portland undertook the HIO Master Plan to "forecast future aviation demand, and to plan for the timely development of new or expanded facilities that may be required to meet that demand" through the year 2025. The Master Plan states that HIO is "the most capable" GA airport out of the 23 public-use airports in the Portland-Vancouver metropolitan area, only one of which, PDX, is a commercial service airport.

In its current configuration, HIO has two intersecting runways, an airport traffic control tower, and an instrument landing system. The primary runway is 6,600 feet long and 150 feet wide (the longest runway at all GA airports in the area), and serves the mix of large business jet aircraft and GA aircraft which use HIO. The precision instrument approach is aligned with this primary runway. The second runway is a cross-wind runway 4,049 feet long and 100 feet wide, which serves primarily small GA aircraft. In addition, HIO has three taxiways parallel with the runways and three helicopter takeoff sites (or helipads). Two of the helipads are located at the end of each runway and the third, the Charlie helipad, is located parallel to the primary runway. Due to its capabilities —which cannot be readily replicated without significant capital investments—HIO has evolved as the primary GA airport in the Portland-Vancouver metropolitan area.

HIO's significant role in the region is reflected in its annual service volume ("ASV"). ASV is one dimension of airfield capacity and a fundamental tool in airport planning. As used in the HIO Master Plan, ASV represents a "reasonable estimate of the maximum level of aircraft operations that can be accommodated at [an airport] in a year" at acceptable levels

⁴This is the definition used by the FAA Advisory Circular 150/5060-5, *Airport Capacity and Delay*, at 2 (Sept. 1983). ASV has another widely-used definition: the level of annual activity at which the average delay per operation is 4 minutes. *See*, e.g., FAA Order 5090.3C, *Field Formulation of the National Plan of Integrated Airport Systems*, at 20 (Dec.4, 2000).

of service. ASV accounts for differences in airfield characteristics, aircraft mix, weather conditions and demand characteristics (the mix of different types of aircraft operations) that would be encountered over a year's time. ASV is not a ceiling and airports often operate above the ASV. The FAA, however, requires that improvements for airfield capacity purposes be considered when operations reach 60 percent of ASV. The goal of airfield capacity improvements is to increase ASV to a point where annual operations represent between 60 and 80 percent of ASV.

The HIO Master Plan forecast that the ASV for 2007 would be 169,000, the annual runway operations 166,033, and therefore HIO would operate at 98 percent of ASV. This would result in an average delay of 1.2 minutes, and a total aircraft delay of 3,321 hours a year. By 2010, ASV would increase to 176,000, the annual runway operations would increase to 196,600, and HIO would operate at 112 percent of ASV. The average delay would be 1.9 minutes, and the total aircraft delay 6,200 hours a year. By 2015, ASV would increase to 174,000, the annual runway operations to 214,600, and HIO would operate at 123 percent of ASV. The average delay would be 3.6 minutes, and the total aircraft delay 12,900 hours a year. For 2025, ASV would drop slightly to 171,000, but the annual runway operations would further increase to 249,300, and HIO would operate at 146 percent of ASV. The average delay would be 6 minutes, and the total aircraft delay 24,900 hours a year. Increasing levels of annual delay create undesirable conditions such as increased air emissions, increased operating costs, and extended air traffic patterns.

⁵See FAA Order 5090.3C at 24. That order, however, defines ASV as the level of annual activity at which the average delay per operation is 4 minutes. By contrast, the HIO Master Plan appears to calculate the ASV as the level of annual activity at which the average delay per operation is slightly more than 1.2 minutes. See infra at 16269-70. Whether the Master Plan's recommendations for airfield capacity improvements would have been the same had it relied on the ASV definition actually used by FAA Order 5090.3C is not before us.

After analyzing two alternative actions—increasing radar coverage and building additional exit taxiways to the primary runway—the Master Plan concluded that adding a runway for use by small GA aircraft exclusively is "the best means available for reducing delays and the undesirable conditions that occur due to delay." Adding a new runway would allow HIO to operate at 65 percent of ASV in 2012, 69 percent in 2015 and 81 percent in 2025.

III. The Proposed Project—Construction of a New Parallel Runway and Related Actions

Following the Master Plan's recommendations, the Port of Portland proposed to construct a new, 3,600-foot-long and 60-foot-wide, runway parallel to the existing primary runway, to construct associated taxiways, relocate the Charlie helipad, and make associated infrastructure improvements. The Port proposed to start the construction of the new runway and associated taxiways in 2010 and complete them by 2011. The relocation of the Charlie helipad would start in 2014 and the relocated helipad would be in operation by 2015. The modifications would be partially funded by FAA grants and would therefore require FAA approval and the preparation of an environmental assessment ("EA").

The FAA approved and published a Draft Environmental Assessment ("DEA") prepared by the Port on October 9, 2009.⁶ For its purposes, the FAA approved the use of the HIO Master Plan's demand forecast.⁷ The DEA stated the purpose of the project is "to reduce congestion and delay at HIO in accor-

⁶For an explanation of the roles of the FAA and the Port in the process of preparing the EA for the HIO expansion project, see *infra* p.16276.

⁷Although the FAA found that the Master Plan's forecast was outside the FAA's recommended range of variation from its own forecast at the 5-year mark (by then 2013), it found that it was within the range of variation at the 10-year mark (then, 2018). The FAA ultimately approved the use of the Master Plan's forecast for use in the DEA.

dance with planning guidelines established by the FAA." The DEA explained that as congestion and delay increase, HIO's ability to serve as an attractive, safe and efficient reliever for PDX diminishes:

The proposed action is needed because the HIO airfield is currently operating at close to 100 percent of annual service volume (ASV) and current Airport activity levels exceed the FAA capacity planning criteria. . . . Forecast activity levels through 2025 are expected to substantially exceed the ASV of the current airfield, with increasing levels of unnecessary congestion and delay corresponding to the increased demand.

In the DEA, the Port considered the proposed project and seven alternative actions, including a "no action" alternative. The Port eliminated five of these alternatives as not meeting the purpose and need of the project and focused on the three remaining alternatives. Alternative 1, the "no action" alternative, would maintain the status quo and would not meet the purpose and need for the project. Under Alternatives 2 and 3, HIO would gain a new runway parallel to the primary runway, a taxiway parallel to the new runway, and additional infrastructure, including electrical service for lighting and signage, an access roadway, and drainage facilities for new impervious surfaces. The alternatives differed only as to the new location of the Charlie helipad, which needed to be moved in order to make room for the new runway.

The Port analyzed the environmental impacts of the three alternatives. It found that, due to its location, a new runway would increase the size of the area of significant noise impact compared to the "no action" alternative, but no residential or other noise-sensitive land uses occur in that area. In fact, Alternatives 2 and 3 would shift noise impacts modestly away from the most densely populated residential areas and towards

farmlands. Construction noise impacts would be temporary and would not approach the FAA threshold of significance.

The Port stated that Alternatives 2 and 3 "would not lead to increased aviation activity compared to the No Action Alternative." It concluded, "In the absence of induced off-airport development, increased levels of aviation activity, or significant environmental impacts, [Alternatives 2 and 3] would not lead to secondary impacts with respect to shifts in patterns of population movements and growth, public service demands, or changes in business and economic activities."

The Port found that the construction of the new runway would temporarily increase air emissions, but estimated that they would not be significant. As to the operational emissions, the Port stated that "[o]nce constructed, operation of the proposed project would not increase emissions from other sources because all of the alternatives under consideration would experience the same level of aviation activity." In fact, by reducing congestion and delay, Alternatives 2 and 3 would reduce aircraft ground idle emissions compared to the "no action" alternative and result in "long-term, ongoing emission reductions." Relying on the fact that operations at HIO represent less than 1 percent of U.S. aviation activity, the Port stated that it did not expect the emissions of greenhouse gases from the project to be significant.

The Port further found that a new runway would slightly increase storm water runoff, impact some 70 acres of vegetation (which include 6.30 acres of Vegetated Corridor as defined by Clean Water Services), result in permanent loss of 2.22 acres of wetlands, affect some 50 acres of prime farmland or farmland of statewide importance, and raise electricity use slightly. To mitigate these impacts, the Port proposed compensating for damaged wetlands by restoring or enhancing the same acreage of historic wetlands in a nearby environmentally-sensitive area. It also provided a plan to reduce air emissions during construction, designed a strategy

to absorb excess storm water runoff, proposed measures to protect wildlife and plants, and adopted a protocol for preserving any artifacts found during construction.

In light of the above, the Port concluded that a new runway would not have cumulative significant impacts.

The FAA made copies of the DEA available to the public and solicited public comment for 45 days. On November 10, 2009, the Port held a two-hour meeting with the public. The meeting had an open house format, which included tables with copies of the DEA, multiple stations with information about the project, and a stenographer for recording oral statements. Twice during the meeting, the Port made a presentation providing an overview of the project and summarizing the results of the DEA. Approximately 18 members of the public attended the meeting. Petitioner Barnes made oral statements. Seven individuals, including all three petitioners, submitted written comments.

The Port made minor revisions to the DEA in response to comments from the public and prepared a final environmental assessment ("EA"). The Port selected either Alternative 2 or 3 as the preferred alternative. The FAA approved the EA and issued a FONSI on January 8, 2010.

Petitioners filed a timely petition for review in this court pursuant to 49 U.S.C. § 46110. They argue that the FAA violated the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321 et seq. Specifically, they contend that: (1) the FAA failed to consider the indirect effects of increased aircraft operations; (2) the context and intensity of the project requires that the FAA prepare an environmental impact statement; (3) the FAA failed to take a hard look at the cumulative effects of the project; and (4) the FAA failed to consider a reasonable range of alternatives. Petitioners also argue that the FAA failed to provide them with a public hearing, in violation of the Airport and Airway Improvement Act of 1982,

49 U.S.C. §§ 47101 *et seq*. The Port intervened in this petition as an interested party pursuant to 49 U.S.C. § 46109.

ANALYSIS

I. The National Environmental Policy Act Claims

A. Statutory Background

The National Environmental Protection Act of 1969, commonly known as NEPA, is "our basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a) (2006). Congress passed NEPA "to protect the environment by requiring that federal agencies carefully weigh environmental considerations and consider potential alternatives to the proposed action before the government launches any major federal action." Lands Council v. Powell, 395 F.3d 1019, 1026 (9th Cir. 2005). To accomplish this, "NEPA imposes procedural requirements designed to force agencies to take a 'hard look' at environmental consequences." Earth Island Inst. v. U.S. Forest Serv., 351 F.3d 1291, 1300 (9th Cir. 2003). NEPA. however, does not contain substantive environmental standards, nor does it mandate that agencies achieve particular substantive environmental results. Bering Strait Citizens for Responsible Res. Dev. v. U.S. Army Corps of Eng'rs, 524 F.3d 938, 947 (9th Cir. 2008).

NEPA requires federal agencies to prepare an EIS before undertaking "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). An EIS must "provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1.

Under the Council on Environmental Quality regulations implementing NEPA, an agency prepares an EA in order to

determine whether to prepare an EIS or to issue a FONSI, the latter of which excuses the agency from its obligation to prepare an EIS. See C.F.R. §§ 1500.1-.8; Morongo Band of Mission Indians v. FAA, 161 F.3d 569, 575 (9th Cir. 1998). Regulations consistent with this approach have also been promulgated by the FAA for the purpose of evaluating FAA actions, including airport developments. See F.A.A. Order 1050.1E, Policies and Procedures for Considering Environmental Impacts ¶ 201 (Mar. 20, 2006).

Under the FAA regulations, the FAA was required to conduct an environmental assessment of the HIO expansion project. See id. § 401k (EA required for "[f]ederal financial participation in, or unconditional airport layout plan approval of, the following categories of airport actions: . . . (2) New runway."). The FAA permitted the Port, as the proponent of the project, to prepare the draft and final environmental assessments, a task which the Port contracted to CH2M HILL. See 40 C.F.R. § 1506.5(b) (federal agencies may permit an applicant to prepare an EA). The FAA, however, was required to independently evaluate the information in the EA and was responsible for its accuracy. Id. § 1506.5(a). The FAA was also required to make "its own evaluation of the environmental issues and take responsibility for the scope and content of the environmental assessment." Id. § 1506.5(b). In light of the foregoing, we review the actions by the FAA—taken either independently or in conjunction with the Port,—and not separately the actions by the Port.

B. Standard of Review

The Administrative Procedure Act ("APA"), 5 U.S.C. §§ 701 *et seq.*, provides the authority for this court's review of agency decisions under NEPA. *See*, *e.g.*, *Pit River Tribe v. U.S. Forest Serv.*, 469 F.3d 768, 778 (9th Cir. 2006). A reviewing court may set aside an agency action only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). Review under

the arbitrary and capricious standard is narrow, and we do not substitute our judgment for that of the agency. Lands Council v. McNair, 537 F.3d 981, 988 (9th Cir. 2008) (en banc), overruled on other grounds by Winter v. Natural Res. Defense Council, 129 S. Ct. 365 (2008). An agency decision will be upheld as long as there is a rational connection between the facts found and the conclusions made. Siskiyou Reg'l Educ. Project v. U.S. Forest Serv., 565 F.3d 545, 554 (9th Cir. 2009).

In reviewing an agency's decision not to prepare an EIS, the arbitrary and capricious standard under the APA requires this court

to determine whether the agency has taken a "hard look" at the consequences of its actions, "based [its decision] on a consideration of the relevant factors," and provided a "convincing statement of reasons to explain why a project's impacts are insignificant."

Envtl. Prot. Info. Ctr. v. U.S. Forest Serv., 451 F.3d 1005, 1009 (9th Cir. 2006) (quoting Nat'l Parks & Conservation Ass'n v. Babbitt, 241 F.3d 722, 730 (9th Cir. 2001)).

C. Waiver

- [1] Preliminarily, the Port and the FAA argue that the petitioners waived their NEPA arguments because they failed to raise them during the public comment period.
- [2] Persons challenging an agency's compliance with NEPA must "structure their participation so that it . . . alerts the agency to the [parties'] position and contentions," in order to allow the agency to give the issue meaningful consideration. Dep't of Transp. v. Public Citizen, 541 U.S. 752, 764 (2004) (quoting Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc., 435 U.S. 519, 553 (1978)). The agency, however, bears the primary responsibility to ensure

that it complies with NEPA and an EA's flaws "might be so obvious that there is no need for a commentator to point them out specifically in order to preserve its ability to challenge a proposed action." *Public Citizen*, 541 U.S. at 765. This court has interpreted the "so obvious" standard as requiring that the agency have independent knowledge of the issues that concern petitioners. '*Ilio* 'ulaokalani Coal. v. Rumsfeld, 464 F.3d 1083, 1092 (9th Cir. 2006).

Our review of the record of the hearing held by the Port and the written materials submitted by petitioners persuades us that they raised some, but not all the arguments they raise now. We address them in turn.

Petitioners first argue that the EA is inadequate because the Port and the FAA failed to consider the indirect effects of increased aviation activities due to the proposed expansion in capacity at HIO. Although petitioners Barnes and Conry expressed generalized grievances about the negative effects of aviation activities, the HIO's role as a reliever airport for PDX, and the high level of operations at HIO, there is nothing in their comments to alert the agencies to petitioners' argument that a new runway would cause an increase in the level of operations at HIO and that the DEA should have addressed the environmental impacts of that increase.

[3] By contrast, petitioner Ackley stated in a letter responding to the DEA that he was "opposed to a third runway because such a development would adversely affect our property value and our quality of life," and that "[i]ncreased air traffic will affect our quality of life and the value of our property should we wish to sell it." We see no other way to read this comment than that petitioner Ackley equated the construction of a third runway with increased air traffic. He also identified indirect effects resulting from increased air traffic—greater noise pollution, decrease in property value, and a decrease in quality of life. Although the agencies might have preferred that petitioner Ackley be more expansive or

more detailed in his comments, petitioners need not "incant [certain] magic words . . . in order to leave the courtroom door open to a challenge." *Idaho Sporting Congress, Inc. v. Rittenhouse*, 305 F.3d 957, 966 (9th Cir. 2002).

[4] Even if petitioner Ackley's letter were insufficient to alert the FAA to the issue of increased demand, we are persuaded that the agencies had independent knowledge that the HIO expansion project would cause an increase in aircraft activity.8 Petitioners rely on three statements in the administrative record. First, while reviewing a draft of the Scope of Work document for the EA, an FAA official inquired whether the Air Quality section "need[s] to assume/consider a worst case scenario for maximum use of the 3rd runway." Second, the Scope of Work contained this statement: "The proposed action is expected to reduce aircraft emissions compared to the no action alternative, but it is possible that construction of the third runway would remove a constraint to growth in aircraft activity. . . . Preliminary analyses indicate that the degree of delay reduction per operation associated with the proposed action would more than offset the potential increase in aircraft operations." Third, an attachment to an email regarding the demand forecast at HIO stated that, even with a new runway, by 2015 operational demand at HIO will again exceed 60 percent of ASV and in 20 years will exceed 80 percent of ASV. Petitioners interpret this forecast as proving that the agencies were aware that the newly-created capacity would begin to be filled immediately.

The agencies challenge the significance of the three statements. They contend that the third statement is consistent with

⁸Petitioners also argue that the FAA and the Port were apprised of their objection when they filed with this court a Request to Stay Pending Review over three months before filing their opening brief. The Request for Stay was filed months after the issuance of the FONSI. It is therefore irrelevant to the issue of whether petitioners raised their objections during the public comment period.

the HIO Master Plan's demand forecast. The agencies are correct on this point. They further contend that the first two statements were made in the early stages of the administrative process and that the Supreme Court has cautioned that courts must focus on the final action by an agency. The Supreme Court, indeed, has held that the mere fact that a preliminary determination is overruled at a higher level within the agency does not render the decisionmaking process arbitrary and capricious:

With regard to the various statements made by the involved agencies' regional offices during the early stages of consideration, the only "inconsistency" respondents can point to is the fact that the agencies changed their minds—something that, as long as the proper procedures were followed, they were fully entitled to do. The federal courts ordinarily are empowered to review only an agency's final action, see 5 U.S.C. § 704, and the fact that a preliminary determination by a local agency representative is later overruled at a higher level within the agency does not render the decisionmaking process arbitrary and capricious.

Nat'l Ass'n of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 659-60 (2007). The Court did not hold, however, that such preliminary determinations are irrelevant in any context—such as the question of waiver raised by the FAA here, or that they may not be considered when reviewing an agency action. See id.; cf. Wetlands Action Network v. U.S. Army Corps of Engineers, 222 F.3d 1105, 1122, 1122 n. 8 (9th Cir. 2000) (considering the evidentiary value of an internal memorandum in analyzing whether an EA and subsequent FONSI were arbitrary and capricious), abrogated on other grounds by Wilderness Soc. v. U.S. Forest Serv., 630 F.3d 1173 (9th Cir. 2011).

Two of the statements identified by petitioners show that the FAA officials involved in the planning process for the HIO expansion project acknowledged the possibility that an additional runway would induce growth. The agencies contend these early opinions reflect thorough consideration of the issue, but were ultimately rejected, as confirmed by the fact that the DEA discussed growth-inducing effects and found none. The agencies fail to mention, however, that the entirety of the EA discussion of the growth-inducing effects on aviation activities consists of these two sentences:

As described in Section 3.2.2, Alternative 2 would not lead to increased aviation activity compared to the No Action Alternative. . . . In the absence of induced off-airport development, increased levels of aviation activity, or significant environmental impacts, this alternative would not lead to secondary impacts with respect to shifts in patterns of population movement and growth, public service demands, or changes in business and economic activities.

On its part, Section 3.2.2 conclusorily states, "Total aircraft operations would be the same as under the No Action Alternative."

[5] The agencies are unable to point to anything in the record showing that they in fact considered the possibility that expanding HIO's capacity would lead to increased demand and increased aircraft operations, but discounted it in the face of evidence to the contrary. Furthermore, the FAA acknowledged that a new runway is "the most effective capacity-enhancing feature an airfield can provide," and repeatedly stated that HIO, a busy reliever airport, must accommodate all GA activity demand directed towards it. Most relevantly, as stated above, the two statements identified by petitioners demonstrate that FAA officials were aware that a new runway could induce growth and accordingly included a statement to this effect in the Scope of Work document. Cumulatively,

⁹At oral argument, counsel for both the FAA and the Port expressly disclaimed the possibility that the new runway could induce increased demand at HIO.

this record demonstrates that the agencies had independent knowledge of a reasonable possibility that increasing capacity at HIO would lead to increased demand, but chose to gloss over it. We therefore hold that the agencies' failure to discuss the environmental impact of increased demand is a flaw "so obvious" that there was no need for petitioners to point it out specifically in order to preserve their ability to challenge the EA on this ground. *See Public Citizen*, 541 U.S. at 765; '*Ilio* 'ulaokalani Coal., 464 F.3d at 1092.

- [6] Petitioners' next argument is that the context and intensity of the project require an EIS. See 40 C.F.R. § 1508.27. During the comment period, petitioner Barnes stated that the DEA's conclusion that the HIO project would have no significant environmental impact is inappropriate for "this facility, which logs close to a quarter of a million annual operations" and accused the FAA of trying to downplay the negative effects of aviation activities at HIO, including pollution. The only fair reading of these comments, in light of petitioner Barnes' overall testimony, is that she thought that an EIS should be prepared for the project in light of its context and intensity. The argument is not waived.
- [7] Petitioners also challenge the EA's assessment of the project's cumulative impacts. The argument is premised on the agencies' failure to consider the effects of a new control tower and two proposed zoning changes that would impact areas north of HIO. In her comments, petitioner Barnes contended that one of the zoning changes would "essentially [result in] an expansion of the Airport boundary" and would operate as a "taking of neighboring private properties." These comments alerted the agencies to the need to consider the effects of the proposed zoning changes while assessing the project's cumulative impacts. To that extent, the argument is not waived.

Petitioners' comments, however, did not include one single reference to a new control tower. They nevertheless point our attention to a series of emails in the administrative record discussing whether the new runway would be in the "line of sight" of the existing control tower. Although not couched in these terms, petitioners essentially argue that the EA's failure to consider the alleged new control tower falls under the "so obvious" exception discussed above. *See Ilio 'ulaokalani Coal.*, 464 F.3d at 1092.

The emails identified by petitioners reflect one FAA employee's concerns whether the existing control tower meets the current height and downward angle viewing requirements for control towers. Another FAA employee responded that regulations had changed since the tower had been built and that the tower may have been operating under a waiver or a grandfather clause in the new regulations. The employee stated that there were no safety concerns because the length and position of the new runway would allow for an enhanced downward angle compared to the primary, longer runway. The same employee clarified that HIO "is not in line for a new tower," although he also commented that "[t]his may be a backdoor way to get a new tower paid for by AIP."

- [8] Consistent with this email, the agencies assert before this court that there is no new control tower project and that the FAA has no concerns about HIO's safety in the absence of a new tower. Because there is no plan, immediate or remote, to build a new control tower, according to the agencies, their alleged failure to address it in its cumulative impacts analysis is not a flaw, let alone one "so obvious" as to dispense with the requirement that petitioners raise it themselves before the agencies. *See* 40 C.F.R. § 1508.7 (as part of its cumulative impacts analysis, an agency must assess impacts of "reasonably foreseeable future actions"). The petitioners' argument is both meritless and waived.
- [9] Petitioners further argue that the EA is inadequate for failing to consider a reasonable range of alternatives. In her comments, petitioner Barnes recommended that the monies

earmarked for aviation be redirected "towards high-speed rail and environmentally sustainable transportation alternatives that provide protection for urban and rural communities from the negative impacts of aviation." An EA, however, need only discuss alternatives that advance the purpose of the project. *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1246-47 (9th Cir. 2005). Here, the purpose of the project is "to reduce congestion and delay at HIO in accordance with planning guidelines established by the FAA." Petitioner Barnes's recommendations of alternative modes of transportation failed to alert the agencies to the argument that the range of alternatives *to the project* actually discussed in the EA was not reasonable. The argument lacks merit and is waived.

In sum, petitioners' comments sufficiently raised the argument that the EA should have considered the indirect effects of increased demand for aviation activities due to increased capacity. Furthermore, the EA's failure to address this argument is a flaw "so obvious" that petitioners did not need to preserve it by raising it in their comments. Petitioners' arguments that the EA did not consider a reasonable range of alternatives and the impacts of a new control tower are both waived and unpersuasive. They preserved their arguments that an EIS should have been prepared because the context and intensity of the project is significant and that the cumulative impacts analysis was deficient for failing to address zoning changes related to the airport and neighboring properties. We address the arguments properly before us in order.

D. Indirect Effects

[10] Petitioners' main argument in this petition for review is that adding a new runway at HIO would result in increased demand and that the EA is deficient for failing to consider the impact of the indirect effects from this increased demand.

Petitioners emphasize that an EIS must be prepared if "substantial questions are raised as to whether a project . . . may

cause significant degradation of some human environmental factor." Ocean Advocates v. U.S. Army Corps of Eng'rs, 402 F.3d 846, 864 (9th Cir. 2005) (internal quotations and quotation marks omitted). To trigger the need for an EIS, a plaintiff need not show that significant effects will in fact occur; "raising substantial questions whether a project may have a significant effect is sufficient." Id. at 864-65 (internal quotations omitted). The effects that must be considered are both direct and indirect. 40 C.F.R. § 1508.8. Indirect effects are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Id. at § 1508.8(b). Indirect effects include growth inducing effects. Id. "While foreseeing the unforeseeable' is not required, an agency must use its best efforts to find out all that it reasonably can." City of Davis v. Coleman, 521 F.2d 661, 676 (9th Cir. 1975).

[11] The agencies' first line of defense is that the project will not have growth-inducing effects on aviation activity. They contend that, according to their forecast, aviation activity at HIO is expected to increase at the same rate regardless of whether a new runway is built or not. And they repeatedly point out that the FAA's expertise in forecasting air transportation demand is an area where courts accord significant deference. See City of Los Angeles v. F.A.A., 138 F.3d 806, 807-08 & n. 2 (9th Cir. 1998).

[12] The agencies cannot point to any documents in the record that actually discusses the impact of a third runway on aviation demand at HIO. Tellingly, the Aviation Demand Forecasts chapter of the HIO Master Plan does not even mention the number of runways at HIO in its almost 50 pages, although it recognizes that aviation demand is affected, among other factors, by "the nature of available facilities." In essence, the agencies would like this court to take their word for it and not question their conclusory assertions in the EA that a new runway would not increase demand. Their word, however, is not entitled to the significant deference that courts

give aviation activity forecasts actually performed by the FAA.

[13] As part of the same strategy, the agencies contend that, while a new runway at a major hub airport might enable airlines to schedule an increased number of connecting flights, thus increasing demand, a new runway at a GA airport is unlikely to attract more private aircraft. The agencies do not explain why this is so and do not refer to anything in the record backing their contention. It strains credulity to claim that increasing HIO's capacity significantly, which in turn would decrease congestion and delay, would have no bearing on the decision of flight schools, the military, emergency medical services, and business and private owners over whether to locate their aircraft at HIO or at other, considerably less busy, GA airports in the area. Ironically, while the pilot survey used to support the HIO Master Plan inquired whether the pilots would consider the availability of rental car services and a restaurant in choosing HIO over other airports, it did not inquire whether they would consider a new runway when making that decision.¹⁰

[14] The agencies are correct to point out that this court has recognized that, "[w]hen it comes to airport runways, it is not necessarily true that 'if you build it, they will come.' "
Nat'l Parks & Conservation Ass'n v. U.S. Dept. of Transp.,
222 F.3d 677, 680 (9th Cir. 2000). 11 But whether that is true

¹⁰The brief for the federal respondents states that "some new runways . . . could be aimed at attracting new flights or be at an airport where [attracting new flights] would be reasonably foreseeable" In light of the FAA's concession that a new runway may increase demand at certain airports, as well as the HIO Master Plan's consideration of various facilities, we disagree that "[s]uch a study would indeed serve little purpose." Dissent at 16299. The FAA's position in numerous other cases also belies the dissent's assertion. See infra, p.16288-89.

¹¹The dissent relies on *Nat'l Parks & Conservation Association*, as well as *Seattle Community Council Fed'n v. F.A.A.*, 961 F.2d 829 (9th Cir. 1992), to state that "aviation demand is driven primarily by variables such

or not here, we do not know because the agencies failed to take the required "hard look," *Earth Island Inst.*, 351 F.3d at 1300, and failed to conduct a demand forecast based on three, rather than two runways at HIO.

The agencies contend that whether the project will result in increased demand is, in any event, irrelevant. Relying chiefly on two cases involving airport improvements—neither of which involved a new runway—they contend that the case

as location, general aviation trends, the 'demand of the flying public,' historical trends, and economic conditions, not the efficiency of the airport."

The dissent's overgeneralization is without support in the two cases. Nat'l Parks & Conservation Association involved the extension of the runway at Kahalui Airport on Maui from 7.000 feet to 9.600 feet. *Id.* at 679. Petitioners contended that the project would increase the number of international arrivals, which in turn would result in introduction of more alien, non-indigenous, species into Maui. See id. The FAA conducted an EIS. Id. The EIS was "replete with data regarding the project's impact on international arrivals," much of which indicated that the project would result in no or little increased number of international arrivals. See id. at 680. This court noted "airport demand projections are little more than guesses that depend on economic conditions, airlines routing decisions and other variables." Id. It then went on to discuss the extensive specific projections for Kahalui and concluded that "[w]hen it comes to airport runways, it is not necessarily true that 'if you build it, they will come.' " Id. Properly read, Nat'l Parks & Conservation Association merely holds that, in Kahalui Airport's case and based on the extensive projections in the EIS, the lengthening of the runway would not result in a demand increase. Nat'l Parks & Conservation Association does not stand for the proposition that the "efficiency of the airport," Dissent at 16299, is irrelevant to demand.

The same is true for *Seattle Community Council Fed'n*. The opinion quotes the FAA's projected demand increase for Sea-Tac, which concluded that "[a]ny increase in the number of operations experienced at Sea-Tac will be the result of demand of the flying public, which the FAA does not control." 961 F.2d at 835. Neither the FAA's demand projections for Sea-Tac nor the *Seattle Community Council Fed'n* opinion itself claims to be a definitive treatise on projecting aviation demand, as the dissent makes them out to be.

law holds that an EA need not account for the growthinducing effects of a project designed to alleviate current congestion (also referred to as secondary growth inducing effects). In Seattle Community Council Fed'n v. F.A.A., 961 F.2d 829 (9th Cir. 1992), we held that remand to the FAA was unnecessary although the FAA did not consider the impacts of an expected increase in air traffic after changes in flight patterns were implemented. Id. at 835. To so hold, we relied on the fact that the project's stated purpose was "not to facilitate that expansion, but to ensure that safety and efficiency will be maintained," meaning that the project "deal[t] with the existing air traffic." Id. (emphasis in original). In Morongo Band of Mission Indians, we similarly held that the FAA did not have to consider the impacts of an increase in air traffic resulting from a new flight arrival path because "the project was implemented in order to deal with existing problems; the fact that it might also facilitate further growth is insufficient to constitute a growth-inducing impact under 40 C.F.R. § 1508.8(b)." 161 F.3d at 580.

Unlike the flight patterns and the flight arrival path at issue in Morongo Band of Mission Indians and Seattle Community Council Federation, this case involves a major ground capacity expansion project. In the words of the FAA itself, a new runway is "the most effective capacity-enhancing feature an airfield can provide." Accordingly, our cases have consistently noted that a new runway has a unique potential to spur demand, which sets it apart from other airport improvements, like changing flight patterns, improving a terminal, or adding a taxiway, which increase demand only marginally, if at all. See, e.g., Seattle Cmty. Council Fed'n, 961 F.2d at 835 ("The proposed [flight patterns changes] do not enhance the ground capacity of Sea-Tac. There is no need to do so since there is existing ground capacity that is not fully used. This would be true even if the proposed procedures were put into effect."); Ocean Advocates, 402 F.3d at 870 ("Morongo and Seattle Community Council Federation are also distinguishable because neither case dealt with any change in ground capacity."); City of Los Angeles, 138 F.3d at 808 (terminal improvement project had no impact on demand; "runway capacity is important, the agency concedes, but not affected by this project"). See also Town of Winthrop v. F.A.A., 535 F.3d 1, 5 (1st Cir. 2008) (noting FAA's argument that building a taxiway would not lead to an increase in flight activity because "airport capacity is primarily a factor of runway capacity, not taxiway capacity"); City of Olmstead Falls, Ohio v. F.A.A., 292 F.3d 261, 272 (D.C. Cir. 2002) (giving deference to the FAA's judgment that improvement by moving a runway will not induce demand; "[h]ere the improvements are to move an existing runway, not the addition of a runway"). Cf. Nat'l Parks & Conservation Ass'n, 222 F.3d at 679-60 (EIS conducted for expansion project that would have lengthened runway in order to accommodate rising demand).¹²

[15] In light of this unique potential to create demand, the analysis in *Morongo Band of Mission Indians* and *Seattle Community Council Federation*—which focuses inflexibly on the stated purpose of a project while ignoring its growth inducing effect —is completely inadequate for cases involving the construction of additional runways. For such cases, a case-by-case approach is needed. Thus, even if the stated purpose of the project is to increase safety and efficiency, the agencies must analyze the impacts of the increased demand attributable to the additional runway as growth-inducing effects falling under the purview of 40 C.F.R. § 1508.8(b).

[16] We hold that *Morongo Band of Mission Indians* and *Seattle Community Council Federation* do not control here and conclude that remand is necessary for the FAA to consider the environmental impact of increased demand resulting

¹²The dissent conveniently ignores the FAA's consistent position in these cases and would treat additional runways just like any other airport efficiency improvement project. *See Dissent* at 16299-16301. In contrast, our "completely unsupported intuition about airports," Dissent at 16305, is clearly supported by the FAA.

from the HIO expansion project, if any, pursuant to 40 C.F.R. § 1508.8(b).

E. The Context and the Intensity of the Project

[17] Petitioners also contend that the "context" and "intensity" of the project independently require an EIS.

Determining whether an action "significantly" affects the quality of the human environment, 42 U.S.C. § 4332(2)(C), requires "considerations of both context and intensity." 40 C.F.R. § 1508.27. "Context" is the setting in which the agency's action takes place. *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 731 (9th Cir 2001), *abrogated on other grounds by Monsanto Co. v. Geertson Seed Farms*, 130 S. Ct. 2743, 2757 (2010). The significance of an action must

be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole.

40 C.F.R. § 1508.27(a).

[18] Building a new runway at HIO is a site-specific project. Petitioners therefore argue that the agencies cannot dilute their analysis of environmental impacts by averaging out across the nation or the globe. More specifically, they contend that the EA is deficient because its analysis of greenhouse gases is not specific to the locale. But the effect of greenhouse gases on climate is a *global* problem; a discussion in terms of percentages is therefore adequate for greenhouse gas effects. See Climate Change Division, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Technical Support Document for Endangerment and Cause or Contrib-

ute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act 2-3 (2009) (emphasizing the global nature of climate change due to greenhouse gases; explaining that "greenhouse gases, once emitted, become well mixed in the atmosphere, meaning U.S. emissions can affect not only the U.S. population and environment but other regions of the world as well; likewise, emissions in other countries can affect the United States.").

"Intensity" refers to the degree to which the agency action affects the locale and interests identified in the context part of the inquiry. *Nat'l Parks*, 241 F.3d at 731. The Council on Environmental Quality regulations provide ten factors under which intensity of a project is evaluated. *See* 40 C.F.R. § 1508.27(b). Any of these factors may be sufficient to require preparation of an EIS in appropriate circumstances. *Nat'l Parks*, 241 F.3d at 731.

Petitioners first argue that the project has both beneficial and adverse effects, see 40 C.F.R. § 1508.27(b)(1), and that it affects public health and safety, see id. § 1508.27(b)(2). This argument is premised on the contention, discussed at length above, that a new runway will cause an increase in demand, thereby increasing air pollution, noise, and risks of accidents. Any further discussion of this issue is superfluous.

Petitioners next argue that the project's effects are highly uncertain or involve unique or unknown risks. See id. § 1508.27(b)(5). An agency must generally prepare an EIS if the environmental effects of a proposed agency action are highly uncertain. Native Ecosystems, 428 F.3d at 1240 (internal quotations and quotation marks omitted). Preparation of an EIS is mandated "where uncertainty may be resolved by further collection of data, or where the collection of such data may prevent speculation on potential . . . effects." Id.

Relying on the FAA's statement in the EA that it is leading or participating in several projects intended to clarify the role that commercial aviation plays in climate change, petitioners argue that the project's greenhouse gas effects are highly uncertain. We disagree. First, there is ample evidence that there is a causal connection between man-made greenhouse gas emissions and global warming. See Massachusetts v. E.P.A., 549 U.S. 497, 508-10, 521-23 (2007) (discussing state of the science); Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66496-01, 2009 WL 4767932 (2009) (EPA findings regarding effects of greenhouse gases in the atmosphere, their effect on climate, and the public health and welfare risks and impacts associated with such climate change). Second, the EA includes estimates that global aircraft emissions account for about 3.5 percent of the total quantity of greenhouse gas from human activities and that U.S. aviation accounts for about 3 percent of total U.S. greenhouse gas emissions from human sources. Because HIO represents less than 1 percent of U.S. aviation activity, greenhouse emissions associated with existing and future aviation activity at HIO are expected to represent less than 0.03 percent of U.S.-based greenhouse gases. Because this percentage does not translate into locally-quantifiable environmental impacts given the global nature of climate change, the EA's discussion of the project's in terms of percentages is adequate. The project's effects are not highly uncertain.

Finally, petitioners argue that this case would establish precedent that an additional runway can be constructed without preparing an EIS. See 40 C.F.R. § 1508.27(b)(6). Although we share this concern, we are confident that our refusal to extend the rule of *Morongo* and *Seattle Community Council Federation* to new runways will ensure that proper consideration will be given to all effects of such a project, including its growth inducing impacts. Also, EAs are usually highly specific to the project and the locale, thus creating no binding precedent. See Town of Cave Creek v. FAA, 325 F.3d 320, 332 (D.C. Cir. 2003) (rejecting a similar 40 C.F.R. § 1508.27(b)(6) argument because the airspace redesign plans

in the case were developed to address the particular circumstances and problems encountered in and around Phoenix Sky Harbor International Airport and that decision would create no binding precedent which would control the FAA's future use of EISs for similar projects). An EIS is not warranted on this basis alone.

F. Cumulative Effects

[19] We next address petitioners' argument that the discussion of cumulative effects in the EA is deficient because the agencies failed to consider the effects of two recent zoning changes impacting HIO.

An EA must fully assess the cumulative impacts of a project. *Te-Moak Tribe of Western Shoshone of Nevada v. U.S. Dept. of Interior*, 608 F.3d 592, 603 (9th Cir. 2010). A cumulative impact is "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7.

[20] In 2009, the City of Hillsboro approved two zoning changes that amended the Hillsboro Comprehensive Plan and the Hillsboro Zoning Ordinance to create two new zones, the Airport Use zone and the Airport Safety and Compatibility Overlay zone. *See Barnes v. City of Hillsboro*, Or. LUBA No. 2010-011 at 3-5 (June 30, 2010) (describing zoning changes), available at http://www.oregon.gov/LUBA/docs/Opinions/2010/06-10/10011.pdf. Petitioner Barnes challenged these zoning changes before the State of Oregon's Land Use Board of Appeals ("LUBA"). In June 2010, LUBA invalidated both zoning changes. *See id.* at 6-28. The Oregon Court of Appeals affirmed. *See Barnes v. City of Hillsboro*, 243 P.3d 139 (Or. Ct. App. 2010). It therefore appears that the two zoning changes would not be implemented. If so, the agencies' failure to consider them as part of its cumulative impacts analysis

is harmless error. See 5 U.S.C. § 706 (in reviewing agency action, "due account shall be taken of the rule of prejudicial error."). See also Nat'l Ass'n of Home Builders, 551 U.S. at 659 (same).

II. Public Hearing Under the Airport and Airway Improvement Act

[21] We now turn our attention to petitioners' argument that the FAA failed to hold a public hearing consistent with 49 U.S.C. § 47106(c)(1)(A)(i).

Under the Airport and Airway Improvement Act, the Secretary of Transportation may not approve an application for "an airport development project involving the location of an airport or runway or a major runway extension" unless "the sponsor certifies to the Secretary that-(i) an opportunity for a public hearing was given to consider the economic, social, and environmental effects" of the project. *Id*.

[22] The statute does not define "public hearing." See id. The FAA, however, defines it in its internal policy documents as "a gathering under the direction of a designated hearing officer for the purpose of allowing interested parties to speak and hear about issues of concern to interested parties." FAA Order 5050.4B, National Environmental Policy Act Implementing (NEPA) Instructions for Airport Projects ¶ 403.a (2006). When the FAA published Order 5050.4B in the Federal Register, it declined to further define "public hearing," explaining:

"Public hearing" is a term of art under 49 U.S.C. 47106(c)(1)(A)(I). . . . [The FAA's Office of Airports] recognizes that the most important aspects of a traditional, formal hearing are that a designated hearing officer controls the gathering and there is an accurate record of the major public concerns stated during the gathering. . . . [The FAA's Office of Air-

ports] declines for the first time in this final Order to define the term public hearing for purposes of 49 U.S.C. 47106(c)(1)(A)(i) and NEPA, including whether a public hearing may take forms other than the traditional one.

National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions, 71 Fed. Reg. 29014, 29032 (2006).

Petitioners focus their arguments on the definition in FAA Order 5050.4B, and do not argue that a public hearing, as the term is used in 49 U.S.C. § 47106(c)(1)(A)(i), is more encompassing than that definition.

The FAA's orders, as agency manuals without the force of law, are not afforded deference under *Chevron U.S.A.*, *Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984). *Natural Res. Def. Council, Inc. v. F.A.A.*, 564 F.3d 549, 564 (2d Cir. 2009). The FAA's interpretation of "public hearing," however, may be entitled to deference pursuant to *Skidmore v. Swift & Co.*, 323 U.S. 134 (1944). *Id.* Under *Skidmore*, the weight courts accord an agency interpretation depends on "the thoroughness evident in [the agency's] consideration, the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade, if lacking power to control." *Id.* (quoting *Skidmore*, 323 U.S. at 140).

[23] We need not decide whether the FAA Order 5050.4B's definition of "public hearing" is entitled to *Skidmore* deference. Even if that definition applies, petitioners still cannot prevail. The record shows that the meeting had a designated hearing officer. The members of the public were invited to talk to project team members, who were available to answer their questions and get their feedback. The members of the public were also invited to visit the oral testimony area to provide their feedback. Twice during the two-hour

meeting, the FAA made a presentation about the project and the EA.

Petitioners argue that the hearing was deficient because there was no exchange of ideas among the members of the public and no facilitation of such exchange by the hearing officer. But all FAA Order 5050.4B requires is that the gathering be under the direction of a designated hearing officer for the purpose of allowing the members of the public to "speak and hear" about the project. This much petitioners were afforded.

Relying on *City of South Pasadena v. Slater*, 56 F. Supp. 2d 1106 (C.D. Cal. 1999), petitioners also argue that an "open house" format—the terminology used by the agencies to characterize the format of the meeting—does not satisfy the requirements of a public hearing. In *City of South Pasadena*, the sponsors of a freeway extension project held an "open house" by opening a storefront for two weeks to facilitate the taking of comments from the public. *Id.* at 1132. The plaintiffs argued that the "open house" was not a "public hearing" as required by 23 U.S.C. § 128 and 23 C.F.R. § 771.111(h) (concerning federal-aid highway programs; "public hearing" not defined). The district court acknowledged that plaintiffs had not shown that a public hearing was required in the first instance. *Id.* It nevertheless went on to say:

[I]n the event that a hearing was required, the plaintiffs have raised serious questions about whether the format of an open house is the equivalent of a public hearing. . . . Public hearings provide the community and the decisionmakers a forum for the free and contemporaneous exchange of ideas. It is a dynamic process which has at its core the idea that it is only through a public meeting that details and intricacies of controversies can be best explored and understood.

Id.

City of South Pasadena, of course, is not binding upon us. Furthermore, not only is the quoted statement dictum, it also lacks any supporting authority. Finally, City of South Pasadena concerned an "open house" very different in nature from the hearing petitioners were afforded here. The case is inapposite.

[24] Petitioners' arguments are unpersuasive. We therefore hold that the hearing afforded petitioners was a "public hearing" within the meaning of 49 U.S.C. § 47106 and FAA Order 5050.4B.

CONCLUSION

For the foregoing reasons, we GRANT the petition for review. We REMAND this case to the FAA with instructions to consider the environmental impact of increased demand resulting from the HIO expansion project, if any, pursuant to 40 C.F.R. § 1508.8(b).

GRANTED and REMANDED.

IKUTA, Circuit Judge, dissenting:

It is conventional wisdom among aviators that "when the weight of the paper equals the weight of the airplane, only then you can go flying." The majority confirms the truth of this quotation: here a federal agency is trying to reduce airport delays and the concomitant negative environmental effects by commencing a project in anticipation of future growth, and the majority sides with delay and air pollution by imposing pointless paperwork on the agency before the necessary project can go forward. Because the majority's approach is contrary to our case law and the facts, I dissent.

A new highway interchange, a new cargo port, and the expansion of the only bridge leading to an offshore island may all attract or facilitate development and thus have "growth inducing effects" under NEPA, 40 C.F.R. § 1508.8(b). See City of Davis v. Coleman, 521 F.2d 661, 674-76 (9th Cir. 1975); Sierra Club v. Marsh, 769 F.2d 868, 878-89 (1st Cir. 1985); Mullin v. Skinner, 756 F. Supp. 904, 917-21 (E.D. N.C. 1990). Does expanding an existing airport have such an effect? Our case law, based on the informed input of the airport experts, says it does not. See Morongo Band of Mission Indians v. F.A.A., 161 F.3d 569, 580 (9th Cir. 1998); Seattle Cmty. Council Fed'n v. F.A.A., 961 F.2d 829, 835-36 (9th Cir. 1992); see also Nat'l Parks & Conservation Ass'n v. U.S. Dep't of Transp., 222 F.3d 677, 680 (9th Cir. 2000); City of Los Angeles v. F.A.A., 138 F.3d 806, 807-08 (9th Cir. 1998).

We have reached this conclusion for several reasons. Most important, airports are expanded to avoid the negative effects that occur when the increasing demand for an airport based on existing conditions swamps that airport's capacity, leading to increased delays and the environmental impacts such delays cause. See Morongo Band of Mission Indians, 161 F.3d at 572; Seattle Cmty. Council Fed'n, 961 F.2d at 835. In other words, before expanding an airport, the FAA engages in a complex process to project growth in demand, and plans the expansion to meet that growth. The goal is to prevent the airport from operating above its annual service volume (ASV), because when "demand reaches capacity, delays increase exponentially." More delays mean that airplanes will have to idle longer before taking off and circle longer before landing, which in turn leads to increased air emissions in the neighboring areas. It would be illogical to hold that after completing a study to determine future demand, and proposing a fix to avoid the negative impacts caused by the anticipated growth in demand, the FAA must then turn around and complete another study to determine whether the fix itself could possibly cause *additional* future demand. Where would this end? Thus, a leading NEPA treatise explains: "[A]n impact statement need not discuss growth-inducing impacts when a highway or other project is planned only to meet existing needs." Daniel R. Mandelker, NEPA Law & Litigation, § 8.41 (2d ed. 2010) (emphasis added). Such a study would indeed serve little purpose, given that aviation demand is driven primarily by variables such as location, general aviation trends, the "demand of the flying public," historical trends, and economic conditions, rather than the efficiency of the airport. See Seattle Cmty. Council Fed'n, 961 F.2d at 835; Nat'l Parks & Conservation Ass'n, 222 F.3d at 680. Thus we have said, "[w]hen it comes to airport runways, it is not necessarily true that 'if you build it, they will come." Nat'l Parks & Conservation Ass'n, 222 F.3d at 680 (quoting City of Los Angeles, 138 F.3d) at 807).

Applying this approach in Seattle Community Council Federation, we rejected the petitioner's argument that the FAA should have considered the potential for increased air traffic due to the project's improvements to the flight patterns of aircraft departing from and arriving at Seattle-Tacoma International Airport. 961 F.2d at 831. We explained that any material increase in air traffic would be due to existing trends, not due to the project itself. See id. at 835 (noting that "the volume of traffic at Sea-Tac will continue to increase" due to "the operational trend of the past three years and the population increase in the metropolitan area"). Indeed, these existing growth trends were the "impetus for proposing" the project in the first place. Id. Because the proposed changes "would sim-

¹For the sake of its argument on appeal, the FAA entertained the counterfactual that a runway built for the very purpose of attracting new flights (or under other hypothetical circumstances not present in this case) "might require examining the impact of those new flights." Such a rhetorical device is scarcely a "concession that a new runway may increase demand at certain airports." Maj. op. at 16286 n.10.

ply accommodate the *existing* demand for landing and departing Sea-Tac more efficiently, thereby reducing delays," we concluded that the environmental "effects of [the potential] increased number of flights" were not "growth inducing effects" that needed to be considered under 40 C.F.R. § 1508.8(b). *Id.* at 835-36.

We applied the rule again in Morongo Band of Mission *Indians*, where the petitioner claimed that the "FAA improperly failed to consider the 'growth-inducing' impact" of a project which, by virtue of making the airport run more efficiently, would also remove "a constraint to growth." 161 F.3d at 580. Because "the project was implemented in order to deal with existing problems," we held that "the fact that it might also facilitate further growth is insufficient to constitute a growth-inducing impact under 40 C.F.R. § 1508.8(b)." Id. Therefore, the FAA did not violate NEPA in failing to include in the EA an analysis of what additional demand (if any) might be induced by the project. See id.; cf. City of Carmelby-the-Sea v. U.S. Dep't of Transp., 123 F.3d 1142, 1162 (9th Cir. 1997) (reasoning that any growth-inducing effect of the project would be "limited" because "Carmel is [already] a well developed area, and . . . it is the existing development that necessitates the freeway" (emphasis added)).

The FAA and the Port followed exactly this approach here. In 2005, Hillsboro Airport (HIO) was already operating above its ASV. That year, the Port started the process of developing a Master Plan that "evaluates the airport's capabilities and role, forecasts future aviation demand, and plans for the timely development of new or expanded facilities that may be required to meet that demand." The Master Plan included a comprehensive forecast of aviation activity at HIO through 2025. Taking into account factors such as "national and regional aviation trends, historical and forecast socioeconomic and demographic information of the area, and historical trends" at HIO for different types of aircraft, the Master Plan projected that aviation demand would continue to grow

such that, by 2025, HIO would be operating at 146% of its ASV, with an average delay of 6.0 minutes per aircraft operation. This additional congestion and delay would lead to further increases in the airport's idle emissions. After examining a number of alternatives, the Master Plan concluded that the "best means available for reducing delays and the undesirable conditions that occur due to delay" over the next 20 years would be to add "a runway [at HIO] for use by small general aviation aircraft exclusively."

The EA for the runway project relied on and adopted the Master Plan's forecast of activity levels through 2025. As noted in the EA, the Port had conceived of and designed the runway project for the very purpose of meeting these forecasted needs, which were "expected to substantially exceed the ASV of the current airfield, with increasing levels of unnecessary congestion and delay corresponding to the increased demand." Thus the record shows that the HIO project will lessen the environmental impacts of the demand pressure at the airport. Nothing in the record suggests the project will have any effect in increasing demand. Given this record, our caselaw, and the FAA's expertise, there is no basis for concluding that the EA was deficient in not addressing the question whether the HIO project would have growth-inducing effects above and beyond the existing demand curve.

II

But that is not even an issue raised by this case, because the petitioners waived it. No petitioner raised a "growth-inducing effects" issue in a way that "alert[ed] the agency to the [parties'] position and contentions," *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 764 (2004) (quoting *Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 553 (1978)), such that the agency had an opportunity to "give the issue meaningful consideration," *id.* To be clear, the issue here is not simply that use of the airport will continue to increase, creating more noise and traffic. The

record establishes that this will happen in any event, and indeed, the pollution and environmental problems will be worse without the addition of a third runway. Rather, the "growth-inducing effects" issue is whether the addition of a third runway will increase the use of the airport beyond the anticipated increase based on existing conditions that was predicted by the Master Plan and was to be addressed by the project. Nothing in the record shows any of the petitioners raising *that* issue.

In claiming otherwise, the majority relies solely on a letter by petitioner Ackley during the public comment process. But the entire thrust of Ackley's letter is to complain about the noise that is caused by air traffic.² He began with the complaint that "we live near the approach pattern to the present runway and the air traffic can be loud and distracting," and then continued with a lengthy discussion of "[t]he adverse

We are opposed to a third runway at Hillsboro because such a development would adversely affect our property value and our quality of life. We live near the approach pattern to the present runway and the air traffic can be loud and distracting. Increased air traffic will affect our quality of life and the value of our property should we wish to sell it. This is not only our opinion but scientific studies document these affects as well.

The adverse effect of air traffic noise on property values has been well documented by over 20 different scientific studies. A meta-analysis of those studies found that, "Stated differently, under these same circumstances, a \$200,000 house would sell for \$20,000 to \$24,000 less" (from A meta-analysis of airport noise and hedonic property values: Problems and prospects By Jon P. Nelson, Department of Economics, Pennsylvania State University). A conclusion like the above from a meta-analysis is a very powerful statement because the study considers other valid studies from metropolitan airports around our country.

Therefore, in the face of valid scientific research and the in name of property owners near the Hillsboro airport, we urge you to discontinue study of the third runway option for the Hillsboro Airport.

²In full, Ackley's letter said:

effect of air traffic noise on property values." In the midst of this discussion, he wrote the one sentence on which the majority hangs its entire argument: "Increased air traffic will affect our quality of life and the value of our property should we wish to sell it." In context, it is clear that Ackley is complaining about the noise caused by the ever increasing use of the airport, a topic the EA discusses at length. The letter's inclusion of the three words "increased air traffic" cannot be deemed to have put the FAA on notice that Ackley was complaining about the growth-inducing effects of the third runway beyond the growth that would be caused by current conditions. Even the most enlightened bureaucrat reading Ackley's letter could not possibly draw such an inference. Indeed, the majority's argument that the FAA should have known that these three words were raising the "growth-inducing effect" claim blurs into the majority's "so obvious" argument; in effect, the majority contends that in light of the "obvious" growth-inducing effect of a third runway, Ackley's three words in a complaint about air traffic noise should have alerted the FAA that he was making such a claim.

But the majority's "so obvious" argument likewise fails for a simple reason. It was not obvious that the HIO project would have growth-inducing effects, particularly since we have held exactly the opposite: when projects are designed to accommodate existing and projected demand, the FAA has no obligation to analyze the possibility that addressing these demands will also lead to a further increase in demand. See Seattle Cmty. Council Fed'n, 961 F.2d at 836. In fact, in the only case where we have addressed a runway project, we deferred to the FAA's determination that the project would have "no or little lasting long-term growth-inducing impact," despite the petitioners' arguments that, had the FAA "taken a harder look, it would have concluded that the project's alien species impact [would] be significant." Nat'l Parks & Conservation Ass'n, 222 F.3d at 680.

Nor does the majority have any basis for countering our longstanding conclusion that airport projects do not have a growth-inducing effect. Indeed, nothing in the record suggests that the mere four- to five-minute time savings that will be occasioned by the addition of the third runway will cause a significant increase in demand. In fact, the only basis for the majority's "so obvious" conclusion is its own conclusory statement that runways should be considered "unique" in their "potential to spur demand." Maj. op. at 16288. Given our deference to agency expertise, we cannot rely on such unsupported conclusions.

The majority's assertion that the FAA "had independent knowledge that the HIO expansion project would cause an increase in aircraft activity," Maj. op. at 16279, is likewise contrary to the record. Although the majority combs through the record, it can point to only two comments (a question in an e-mail and a statement in a preliminary scope of work document) that even arguably relate to the issue of demand induced by the runway project itself. See Maj. op. at 16279-80. All this shows is that two employees at the FAA gave preliminary thought to the possibility of demand being induced by the runway project at the beginning of the administrative process, but the FAA (presumably informed by our case law and its own experts) determined that the issue did not need to be addressed in the EA. Such early considerations by an agency, which are resolved and never appear in the final, official document, cannot color our analysis of whether a particular impact is obvious. See Nat'l Ass'n of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 659 (2007) ("[T]he fact that a preliminary determination by a local agency representative is later overruled at a higher level within the agency does not render the decisionmaking process arbitrary and capricious."); Butte Envtl. Council v. U.S. Army Corps of Eng'rs, 620 F.3d 936, 946 (9th Cir. 2010) (stating that "[a]gencies are entitled to change their minds" and this means the review process is working "just as it should"). In other words, the fact that a couple of FAA employees made the same mistake as the majority does about the impact of an airport project (a mistake that was later corrected in the agency's

review process) is not evidence that the HIO project will cause an increase in demand, let alone that the FAA failed to address an "obvious" issue.

In sum, the FAA did not err in not addressing the question whether the third runway would have an additional growth-inducing effect. In holding otherwise, the majority ignores the deference we owe to agency decisionmaking and substitutes its own completely unsupported intuition about airports. I dissent.