

“MODERNIZATION” MEANS MORE AND BIGGER PLANES: NEW PITCO AIRPORT ADS ARE FALSE AND MISLEADING

By Amory Lovins

<https://aspensflyright.org/1223opeddoc.pdf>

Annotated version documenting the 12 Dec 2023 Aspen Daily News published version. The two texts might not exactly agree due to minor edits. In the text below, “FALSE” refers to italicized County claims and “TRUTH” to facts documented by Aspen Fly Right.

You may have seen the barrage of new ads from Pitkin County to convince us we need an expanded airport for bigger planes. They’re spending \$80,245 and have budgeted \$170,000 of public enterprise funds¹ for a slick professional TV, radio, and print advertising campaign, echoing the half-million-dollar outreach that urged airport expansion about a decade ago².

The new campaign and its supporting site aspensairport.com/modernization promote the County’s plan for more³ and bigger airplanes by calling it something else – *Modernization*.

Aspen Fly Right strongly agrees with the need to improve Aspen’s antiquated terminal, for \$120+ million, and its ground transport. But unmentioned, another \$450 million⁴ of “modernization” would redesign the airfield for doubled-capacity airline (commercial) planes and more mainly private planes like the latest big Gulfstreams—plus, unavoidably, old, dirty, noisy, private 737s and A319s. This can’t possibly deliver “quieter skies and cleaner air” as the County ads claim. And since our Valley’s emergency medical resources could barely manage the crash of a current 70-seat regional jet⁵, new 130–160-seat planes would hardly make us safer.

When voters were last asked, in 1995, they resoundingly rejected bigger planes like 737s⁶. Now advocates hope to rush airfield expansion through without a vote by making it seem mandatory, essential, progressive, widely desired, and—the scammer’s oldest trick—urgent. “Don’t lose out, buy Airport Modernization now!”

Local newspapers’ dozens-to-one ratio of letters and opinion pieces opposing expansion suggests that most citizens want their airport better but *not* bigger. The County therefore seeks to confuse them by lumping better *with* bigger as “modernization” and omitting its unpopular goal and result: bigger planes⁷.

Official information should be accurate and honest, especially when we’re paying for it. But of 27 County claims about the airport we fact-checked last May, over half proved false^{8,9}. Now there are more untruths. Consider this handful of examples, documented at aspensflyright.org/1223opeddoc.pdf:

FALSE: “[T]he FAA is requiring the airport to update the airfield to comply with safety standards¹⁰.”

TRUTH: As local and FAA officials have reaffirmed¹¹, Aspen Airport fully complies with safety standards for all airplanes approved to fly here¹². *Unless* the County requires planes too big to fit, safety needs no new layout, and no new layout would improve safety. An FAA official confirmed to the BOCC that *if* the County doesn't insist on bigger planes, it can keep its existing airfield layout and 95' wingspan limit¹³, fitting both existing and proposed regional jets^{14,15}. To claim the opposite¹⁶, County Staff's summary misled the Airport Advisory Board by inserting before one of his answers a fake question he wasn't asked¹⁷.

FALSE: "The FAA has stated [that] to keep commercial service ASE needs to meet Group III¹⁸ airport design standards [for bigger planes]¹⁹."

TRUTH: The FAA appears to have made no such statement²⁰. I asked the County to specify the exact quotation(s) supporting it²¹, but after three times the statutory reply period, had received none. Loss-of-service scare tactics²² are no more credible today than they were in 1995. The airlines are *not* asking for bigger planes²³. Who is? Perhaps rich owners of private jets too big to land in Aspen?

FALSE: "At the core of modernization are the community's goals of safety, noise reduction, and decreasing pollutants...[which] the airport is working to weave...into future renovations...²⁴."

TRUTH: The ASE Vision public process approved, and the BOCC enshrined in its foundational Resolution 105-2020 governing airport development, six "Core Community Goals" for airline flights. The County's "modernization" plan actually *fails and rejects all six*²⁵, causing two Commissioners to oppose it. The plan's noisier²⁶ and dirtier²⁷ first new plane would *increase* noise and pollution until at least 2027 and never approach the Core Community Goals^{28,29}.

FALSE: "The difference between the 0.8% growth rate in the [community's]...recommendations and the 1.3% forecasted rate...equates to an average difference of less than six enplanements [airline passenger boardings] per day³⁰."

TRUTH: You might think this means six more passengers *on* some typical future day—scarcely visible in the peak-season scrum. No; it means adding an average of six more passengers *each and every day for 20 years*. That totals 91,673 more passengers in 2042 than in 2022³¹—adding a total equivalent to two-thirds of Aspen's resident population every year. We called out this deceptive math in May. The County still repeats it.

The FAA forecasts a half-million Aspen airline visitors in 2050³²—two-thirds more than we can't handle now. County and FAA forecasts assume no constraints on lodging or any other services. The FAA thus becomes Aspen's Developer-in-Chief, overriding all local facts and choices to satisfy its own national aviation forecast, spiraling forever upwards with economic growth.

We'd be smart to retake control of our public airport's private aviation facility (the FBO) and non-safety planning (the FAA will always rightly and skillfully govern public-airport safety). Then we can build the safe, clean, quiet airport we need, when and how we choose—amply financed by FBO revenues³³. And then we can depend on neither a coercive Federal bureaucracy nor an unaccountable private monopoly, but on our own wisdom, foresight, messy vitality, and Home Rule democracy.

That's how momentous our airport choice is. It's why the County should reveal, as we've asked, the most senior employees who approved its misleading ads and website. And it's why every citizen needs to speak up and vote.

Don't be fooled by the ads. "Modernization" is misleading and deceptive. An expanded airfield for more and bigger planes will be less safe, noisier, and more polluting. That's not the *modern* airport of the future that the Roaring Fork Valley needs and deserves.

Amory Lovins (Old Snowmass) is President of the independent, volunteer, nonprofit charity Aspen Fly Right. Its ads, op-eds, and ten documented essays are free at www.aspenflyright.org.

¹ Pitkin County data requested 25 Nov and provided 28 Nov 2023 in response to Ellen Anderson's request under the Colorado Open Records Act. The County declined to provide any further details or clarification.

² The history is reviewed and documented on pp 4–7 of Aspen Fly Right's Essay #4, "The airlines' planes aren't vanishing," 5 Jan 2023, https://aspenflyright.org/wp-content/uploads/2023/05/ABL-essay_4.-Fleet_01Jan2023corr5May2023.pdf.

³ Claims that bigger planes will mean fewer flights are contradicted by the County's 20 April 2023 forecast (Mid-Range, pp 37 and 42, <http://aspenaireport.wpenginepowered.com/wp-content/uploads/2023/05/Agenda-Packet-for-5.18-with-Draft-Meeting-Minutes-from-4.20.pdf>, summarized in 20 Apr 2023 brief to the Airport Advisory Board, <https://pitkincounty.com/DocumentCenter/View/30817/AAB-Aviation-Forecast-Meeting-42023>), which shows 26% more commercial operations, 29% more private and air taxi operations, and 91,673 more airline passengers ("emplanements") in 2042 than in 2022. The 31 May 2023 Forecast revises the first two of these figures to 8% and 29%, https://pitkincounty.com/DocumentCenter/View/31216/Exhibit-A_DRAFT-ASE-Forecast-Draft.

⁴ These most recent official estimates are from the airport budget presentation reported by J. Taris, "The airport is a federally obligated facility. Here's what that means for ASE," *Aspen Times*, 22 Sep 2023, <https://www.aspentimes.com/news/the-airport-is-a-federally-obligated-facility-heres-what-that-means-for-ase/>. The Airport Advisory Board's 21 Sep 2023 meeting recording (<https://drive.google.com/file/d/1vE8FsSPmWfKtU9gE6DFDNUO3SdoDiOkEi/view>) confirms around 1:52 that the current nominal budget includes \$120M for the terminal (assumed to be all debt-financed) and \$450M for the airside rebuild (assumed to get 90% FAA grant support). Apparently nominal dollars are used. The Airport Manager confirmed that actual costs are likely to be higher: A. Salvail, "Design process for new ASE terminal could start early next year," *Aspen Daily News*, 1 Dec 2023, https://www.aspendailynews.com/news/design-process-for-new-ase-terminal-could-start-early-next-year/article_8077d184-50ef-11ed-b62a-ebcadafd8579.html.

⁵ Under ideal conditions and according to the current official mass casualty plan, discussed on p 5 of Aspen Fly Right, Essay #1, "Have a safe flight," 22 Dec 2022, https://aspenflyright.org/wp-content/uploads/2023/06/ABL-essay_2.Safety_22-Dec-2022r.pdf. The responsible body, the Public Safety Council, has not been asked about the new plans for doubled-capacity commercial aircraft. A recent two-car crash seriously injuring five people reportedly called on "every ambulance from Aspen to Carbondale": "News Update: Five people injured in two-car crash on Highway 82," *Aspen Daily News*, 25 Nov 2023, https://www.aspendailynews.com/news/news-update-five-people-injured-in-two-car-crash-on-highway-82/article_3a4b5dbe-8bf1-11ee-96a6-13e11612e4ec.html.

⁶ Pitkin County's 1995 vote rejected, 2,824 to 1,883 (3:2), a \$1.9-million airport revenue bond issue to widen and strengthen the runway to accept bigger planes, and required a second vote before allowing 737 or similar planes to operate at ASE. The same voters had previously approved runway improvements, but evidently wanted better service without bigger planes (especially and specifically 737s). The vote is mentioned on p 3 of the ASE Vision *Technical Working Group Final Report* (<https://aspensairport.wpenginepowered.com/wp-content/uploads/2020/09/Meeting-7-Final-Technical-Working-Group-Report-and-Recommendations-PDF.pdf>), but not in other County-posted Airport documents we can find. See also history in ref. 2 above.

⁷ The County website's aspensairport.com/modernization section mentions bigger planes only once and obliquely: "[T]he FAA has stated [ASE]...must be available to Airport Design Group (ASG)-III aircraft. An ADG-III airport could accommodate aircraft at the larger end of the Design Group III spectrum." The first sentence is true only if the County insists on bigger planes. The FAA has confirmed that this process was entirely "driven by the County": see p 3 of Aspen Fly Right, "Fact-checking Airport claims: over half are false," Essay #14, 4 May 2023, https://aspensflyright.org/wp-content/uploads/2023/05/Essay-14-Fact-checking-claims_rev5May2023.pdf.

⁸ Aspen Fly Right, "Fact-checking Airport claims: over half are false," Essay #14, 4 May 2023, https://aspensflyright.org/wp-content/uploads/2023/05/Essay-14-Fact-checking-claims_rev5May2023.pdf.

⁹ A. Lovins, "Straighten Up and Fly Right," *Aspen Daily News*, 4 June 2023, https://www.aspendailynews.com/opinion/lovins-straighten-up-and-fly-right/article_2f1c483e-02af-11ee-aa8a-773a3fd7da93.html, and "Lovins: Official myths or honest dialogue?," *Aspen Times*, 6 June 2023, <https://www.aspentimes.com/opinion/lovins-official-myths-or-honest-dialogue/>. For such remarks, the BOCC Chair criticized me for impugning Staff's motives. I replied in 28 June 2023 public comments: "I don't think I did that, and I certainly didn't intend to. I did criticize and document specific things Staff *did*. I don't know and didn't speculate about *why* they did so."

¹⁰ [Aspensairport.com/modernization](https://aspensairport.com/modernization), "Why do we need modernization?" When claiming a "need" to redesign the airfield, the County systematically omits the triggering condition: "if we insist on bigger planes."

¹¹ Citations at ref. 8, pp. 4–5, for example, quote the Deputy County Manager and a County consultant who was formerly Chief Counsel of the FAA.

¹² John Bauer, FAA Northwest Mountain Regional Manager, at 25:22–25:50, 11 Apr 2023 brief to BOCC, <https://www.youtube.com/watch?v=d2Sp9S8RRIM&t=664s>, explained that the FAA certified the Airport as safe in 1999 because its experts designed Aspen's 95' wingspan limit for "equivalent safety"—just as safe with the current layout for 95' wingspans as it would be with 118' wingspans in the proposed new layout. Nothing in that calculation has changed. At 1:11:25 in his 12 July 2023 brief to the BOCC, https://www.youtube.com/watch?v=BsQfp6ukyJY&list=PLYAoFMw_qLSv3NWSI5UcfwQyZqs53Gis_&index=25, the Airport Director said flatly that "Standards equal safety," as if Aspen's Modification of Standard were unsafe, but it's not. Aspen Airport has 85 Modifications of Standard, and would not be able to correct roughly half of them. (The FAA uses "Modification" or Modifications, "and" or "of" or "to" Standards, apparently interchangeably.)

¹³ Mr. Bauer explicitly confirmed to the BOCC (11 Apr 2023 Work Session / Special Meeting, <https://pitkincounty.ompnetwork.org/embed/sessions/266309/04-11-2023-bocc-work-session-special-meeting-04-11-2023>, at 2:19:36–2:21:55 (answer at 2:21:37–2:21:53), and reinforced at 2:42:50–2:43:34, that the 1999 Modification of Standard (and its accompanying Ordinance approved to enforce the 95' wingspan limit) would remain in force if the County didn't insist on bigger planes. Even the County's own digest of those 11 April remarks, distributed to the Airport Advisory Board on 20 Apr 2023, asks, "Could ASE maintain the existing 320-foot runway/taxiway separation (34:36)?" and Mr. Bauer answers, "Yes, you can. But again, we then go into kind of an entitlement [grants] only situation"—i.e. the FAA won't force the County to give up its current wingspan limit or layout, but will merely block discretionary grants if it doesn't. As we'll see, that threat could be vitiated simply by keeping control of the FBO and its revenues, as analyzed in Aspen Fly Right, "Runway robbery?," Essay #3, 29 Dec 2022 / 05 Jan 2023, https://aspensflyright.org/wp-content/uploads/2023/06/ABL-essay_3.-FBO_dr21_29-Dec-2022rev5Jan2023.pdf, updated on pp 5–6 of Essay #14 (ref. 8 above) and in note 33 below.

¹⁴ <https://www.aspensairport.com/fact-sheet/>, "Why does the airport need to be modernized or changed?" says "The FAA requires design standards, based on safety. The FAA has requested changes to adhere to these safety standards at ASE, currently operating under a modification to a design standard." Note "requested," not "required" (unless the County continues to insist on bigger planes). The County has also made the misleading claim that the FAA does not allow such modifications; this means the FAA no longer issues them, not that it revokes

existing ones. Of course, as a federal bureaucracy, the FAA naturally prefers standardization and uniformity, and thus tries to whittle down exceptions originally made for good reasons of practicality, reasonable effort, and cost.¹⁵ Both types of regional jets—the current CRJ700 (76’3”) and the proposed ER175LR EWT (93’11”)—fit the current Aspen Airport layout and its 95’ wingspan limit. A new layout is proposed not for either regional jet nor for safety, but to accept bigger Airbus airline planes (A220-100 and -300)—but that would also automatically open the door to bigger private planes too, including dirty, noisy old private 737s and A319s, making the net impact unknowable.¹⁶ In orally introducing the enabling Resolution to the BOCC on 12 July 2023, the Airport Director said at 58:19 (https://www.youtube.com/watch?v=BsQfp6ukyJY&list=PLYAoFMw_qLsv3NWSISUcfwQyZqs53Gis_&index=25, emphasis added) that “*From a budgetary standpoint, the project on the ALP and the removal of the Modification of Standards as the updated ALP [provides] are required. We are required to do those items. Otherwise we are relegated to our annual entitlement funds only, \$2.4 million,*” compared to ~\$4–6 million in annual repair costs. He did not mention that such repair and rehabilitation expenses are explicitly eligible for grants under FAA rules (as Mr. Bauer agreed 11 April at 2:21:50 is “factual”), nor that his own “required” language indicates no regulatory requirement but only his threat to stop discretionary grants—a loss that FBO revenues could readily offset (n 33).¹⁷ Aspen/Pitkin County Airport, “Frequently Asked Questions for the FAA,” handed out to the Airport Advisory Board at its 20 Apr 2023 meeting but not posted on the AAB website, at p 10 of 23. On 7 May 2023, I requested its URL without response. The full details of what Mr. Bauer was asked, what he replied, and what unasked question Staff inserted before his reply in that typescript are in n 24 on p 18 of Essay #14, ref. 8 above, and repeated here: The County’s version in that typescript FAQ provided to me by the County, quoted on p 5 of Essay #14 (n 8 above), said in full, with square brackets added:

b. Is the FAA insisting on this redesign regardless, and what is the impetus?

So back to[,] back to the original safety and access [issues he’d discussed previously as the FAA’s top priorities]. And I mean, that really is the answer to that question is absolutely. We are interested in safety, first and foremost.

The videotape does show approximately that partial answer at 24:25, but not in response to that unasked question—seemingly a Staff paraphrase of other questions from other parts of the 2.8-hour discussion. The question Mr. Bauer was *actually* answering (more fully) was by Dr. Jacque Francis, Chair of the Airport Advisory Board. It was item 4 in the six-page list (handed out at the end) of questions submitted by unstated Staff or citizens. She correctly read it (24:10...), followed by his untruncated answer, both transcribed from the videotape:

Is the FAA’s insistence on eliminating Modifications to Standards at ASE just for safety, or for some other reason as well, and what are the advantages or disadvantages of such changes?

So back to, back to the original safety and access. And I mean, that really is the answer to that question. Absolutely. We are interested in safety, first and foremost. But we are also interested in access to this facility. When federal funding is involved, that dictates that kind of fair and level playing field for access.

So Staff’s fabrication that Mr. Bauer’s answer was responding to the unasked boldfaced question, thus claiming that “absolutely” the FAA is “insisting on this redesign regardless,” is false. However, at some unknown time after I criticized it (Essay #14, 4 May 2023, p 5), but before 3 June 2023 when the WayBack Machine captured it, the 23-page typescript version at <https://www.aspenairport.com/about-aspen-airport/airport-advisory-board-faqs/>—a link confirmed 3 May 2023 by the Airport Director—was taken down and quietly replaced with a web-formatted version corrected to show instead Dr. Francis’s actual question and Mr. Bauer’s full answer. The Airport Director had provided on 20 April 2023 the names of seven County Staff and consultants (plus John Bauer) involved in the FAQ’s input or preparation, but wouldn’t say who did what, so it’s impossible to determine who authorized its release. The most senior official listed was Deputy County Manager Rich Englehart, but his role is unknown.

¹⁸ That is, safely accepting aircraft with wingspan less than 118’ and tail height less than 45’. These bigger planes would require 400’ of separation between the runway and taxiway; Aspen Airport now has 320’.

¹⁹ First page of [aspenairport.com/modernization](https://www.aspenairport.com/modernization), restated at the start of the following “What is modernization?” page. The FAA confirmed in 2018 that *if* “the County wants to accommodate larger aircraft, the Airport must meet [full ADG-III] Standards”; otherwise not; but the County keeps omitting the *if* part.

²⁰ It might be a sloppy paraphrase of a statement by the FAA’s John Bauer at 13:45-14:04 in his 11 April 2023 BOCC brief at <https://www.youtube.com/watch?v=d2Sp9S8RRIM&t=664s> and reprinted in a large poster displayed at the Airport Advisory Board’s 22 May 2023 Open House: “Are changes needed [at the Aspen Airport], yes. I think what Aspen realized back in 2013 was, aircraft are changing. So if you want to keep commercial service, the 95-foot wingspan restriction [currently in place] is not always going to be able to be in place with some of the new

aircraft coming online....” This simply says that at some time in the indefinite future, there may be a reason to switch from current regional jets to larger planes. It does not say this is true now (it’s not), it does not purport to speak for the operators who actually choose their airplanes (the FAA and the County cannot), and any implication that it is a regulatory requirement is false. At 25:54–26:50 on 11 Apr 2023, Mr. Bauer gave the BOCC the two conditions for potentially losing commercial service at Aspen: *if* aircraft with wingspans up to 95’ have all retired, *and if* the only replacements are bigger but the airfield can’t receive them. Focusing on the second condition while ignoring the first isn’t an honest reading. The County’s lead forecaster (William Flock, on p 7 and n 32 in Essay #4, ref. 2) and the current CRJ700s’ maker (cited in n 6 on p 59 of the Forecast) both say its retirement is ~30 years away, even without the normal life extension described in Essay #4. (The Forecast itself said 20 years in its 30 Apr 2023 version, later reduced without explanation to 12–15 years.) Similar-capacity Embraer E175s at least a dozen years younger, and probably brand-new, now said to be replacing CRJ700s at ASE starting in 2023–24 will presumably fly for even longer. Thus Mr. Bauer’s first hypothetical condition is irrelevant to Aspen’s airfield design today. He explicitly linked that retirement-without-replacement scenario to the 2013 *Future Air Service Study*, whose forecast of imminent CRJ700 retirement was several decades too early, as documented in Essay #4. (On its basis, in 2014, the current County Manager told the BOCC that the US CRJ700 fleet would be over half retired by 2022 and all gone by 2025; but zero have retired. That 2013 study excluded all alternatives *including* the under-95’-wingspan E175—later improved to the E175LR-EWT—thus raising the specter of no available airline service beyond Denver. Now the County continues to promote that decade-old myth and falsely puts it in the FAA’s mouth.) In fairness, at 2:19:37, Mr. Bauer implied that the County was stimulated into such speculations by a 2012–13 FAA signal that it may not approve a certain Modification of Standard. But that doesn’t explain the early-1990s SkiCo-and-business-led [Essay #14, note 12] campaign for bigger planes (specifically 737s) to retain commercial service, ending in the 1995 bond-vote defeat by a 3:2 vote and the 1999 adoption of the 95’-wingspan-limit adoption in full collaboration with and with full approval and safety certification by the FAA.

²¹ A. Lovins, 25 Nov 2023 CORA request: “Please provide any and all full and exact quotation(s) relied upon to support that statement, and for each such quotation, please specify its full and exact source, including its URL if online, its page number if a transcript or other document, and its minute if a recording.” The Airport Staff sent only the URL of the 2.8-hour 11 April 2023 BOCC discussion with Mr. Bauer (which doesn’t contain such a statement). I replied the same day (27 Nov 2023) that the URL “is not responsive,” requested the request, and have heard nothing since. The Colorado Open Records Act requires a response within three workdays, or seven with “extenuating experiences” if a notice of delay is sent. The County has often taken weeks or months for CORA responses, many of which remain unanswered. The County Attorney requires all Aspen Fly Right inquiries to be submitted as formal CORA requests, allegedly to ensure proper routing and interdepartmental coordination. Internal documents previously provided reveal that “County Administration” has instructed Staff not to engage with Aspen Fly Right.

²² For example, in the second false statement above, and in a 26 Sep 2023 letter “FAA Calls the Shots Even for the ASE” by County mouthpiece Barry Vaughan (https://www.aspendailynews.com/opinion/the-faa-calls-the-shots-even-for-ase/article_65b98120-5c52-11ee-a442-dfc768b2a088.html), claiming that “The FAA has decreed that we have to comply with the nationwide standards of runway/taxiway separation and runway width”; *cf.* https://www.aspendailynews.com/opinion/pitco-calls-the-shots-at-ase-not-the-faa/article_5f5fc0c0-6015-11ee-a265-3757b5755853.html). The history of loss-of-service claims is documented in Essay #4. Their current unstated logic might perhaps be that in April 2023, FAA said it may or will withhold discretionary airport grants if ASE doesn’t allow bigger planes. However, the BOCC or County voters may ultimately reject bigger planes to protect vital community goals and resist coercion, and choose to replace lost FAA grants by, for example, keeping and reinvesting in the Airport the ample FBO revenues now sent to private-equity investors in Plano (see n 33 below). Continuing to penalize the Airport after such a vote of the people would then serve no useful purpose—only pique—and would contradict the FAA’s mission to promote safe and efficient aviation at Colorado’s third-busiest airport. That would probably elicit corrective actions from within the FAA, the Executive Branch, or Congress.

²³ With the ambiguously rumored, unannounced, but possible exception of Delta, which has just chosen to resume year-round Aspen service but would strain to sustain its key Atlanta-Aspen route using today’s E175LR-EWT aircraft, less summer-capable than the CRJ700. Delta has about 3% of the recent Aspen airline market.

²⁴ First page of [aspenairport.com/modernization](https://www.aspenairport.com/modernization), restated at the top of the next “What is modernization?” page.

²⁵ In summary:

<i>Category</i>	<i>Core Community Goal</i>	<i>County's plan</i>
Noise per Landing & Takeoff	≥ 30% (~5 dBA) less by 2030	1.3 or 3.4 dBA <i>noisier</i> in 2030
Air pollution (NO _x)	≥ 30% less by 2030	15% <i>higher</i> in 2030
Global warming (CO ₂)	≥ 30% less by 2030	13% less in 2030 if on same routes
Maximum Takeoff Weight	not above 140,000 lb	156,300* lb (A220-300)
Seats per plane	not above 100–120	130–160 (A220-300 ²⁵)
Av. passenger growth 2022-42	~0.8% per year	1.3% per year

* The A220-300's Maximum Takeoff Weight was rated at 69.9 metric tons (154,060 lb) until mid-2021, when a 70.9-metric-ton (156,264 lb) option became available (<https://www.flightglobal.com/air-transport/airbus-extracts-more-range-from-a220-300-with-further-weight-increase/143001.article>). The County's consultants used 149,000 lb in documents for ASE Vision (e.g. <https://aspensairport.wpenginepowered.com/wp-content/uploads/2020/09/Meeting-1-Available-Aircraft-PDF.pdf>); if that were correct, then making the A220-300 the Critical Design Aircraft would not exceed 150,000 lb and thus trigger the FAA's 150' runway width requirement (which was already in the Common Ground Recommendations), but apparently MTOW over 150,000 lb is now being assumed, consistent with Airbus's published specifications. Further, the County describes only the 130-seat Delta version of this roughly doubled-capacity plane that the FAA insists Aspen Airport be rebuilt around as its Critical Design Aircraft. However, this aircraft is "perfectly tailored for the 120–160 seat market" (<https://aircraft.airbus.com/en/aircraft/a220/a220-300>), European regulators have approved up to 149 seats, and stretch versions up to 180 have been mentioned. (Strangely, the latest Airport website posting about future airplanes captions data on "Delta CRJ700's versus A220-300," but clicking on that caption switches the comparison to the 109-seat A220-100, showing no data for the A220-300.) Wider runways are often claimed to be vital for improved ASE operating safety, but a new industry study confirms that runway excursions (of which ASE had six in six months in 2022, each disrupting about a thousand guests' travel—Essay #1, p 2) are generally due to pilot error, not to too-narrow runways: NBAA, "Reducing Runway Excursions in Business Aviation," 2023, <https://nbaa.org/wp-content/uploads/aircraft-operations/safety/in-flight-safety/reducing-runway-excursions-business-aviation/NBAA-Reducing-Runway-Excursions-in-Business-Aviation-2023.pdf>.

We adopt here the BOCC's own criterion²⁵—impacts per *airplane*—not per *passenger*, which County Staff substituted to make bigger planes' impacts look smaller. Aspen Fly Right's detailed analysis demonstrating the values tabulated above is on pp 4–7 of Essay #15, "Crucial aviation forecast fudges facts, ignores Aspen conditions, scraps local choice," 17 May (revised 25 June) 2023, <https://aspensflyright.org/wp-content/uploads/2023/06/ABL-essay-15-Forecast-dr11s.pdf>. The range of increased noise reflects the difference between the official data (ICAO, August 2019) and the unstated lower value substituted by leading expansion advocate and longtime County advisor Bill Tomcich without documentation. This table counts both airline passenger growth and changes in the fleet mix, but excludes private planes (recently ~83% of Aspen Airport's takeoffs and landings, and including many noisy Stage 3 jets). By the 2042 end of the current forecast, Aspen's airline fleet would emit about 40% more NO_x and ~12% less CO₂ than the 2022 fleet. Our analysis conservatively omits the extra E175LR-EWT flights needed on hot days to provide service equivalent to the more capable existing CRJ700 jets, and doesn't reflect any changes from higher-thrust engines recently proposed for the E175LR-EWT but requiring its full recertification.

²⁶ By more than a third (an average of 5.1 dBA) according to the official industry data (<https://aspensairport.wpenginepowered.com/wp-content/uploads/2020/09/Meeting-1-Available-Aircraft-PDF.pdf>), or a still-annoying 1.7 dBA (range 0.8–2.5) after unspecified and undocumented adjustments by Bill Tomcich. The tiny data boxes shown at <https://www.aspensairport.com/modernization/airport-layout-plan/> show only the latter value. The official August 2019 ICAO data show an especially large difference in flyover noise—82.4 EPNdB for the CRJ700 vs. 93 for the E175LR-EWT—that's important for neighborhoods under the flight path.

²⁷ The E175LR-EWT regional jet emits 12% more nitrogen oxides per Landing and Takeoff cycle (LTO) than the current CRJ700 regional jet. This may rise or fall with proposed higher-thrust engines if adopted and recertified.

²⁸ Aspen Fly Right's originally published Exhibit 1a in Essay #15 showed this would occur in the mid-2030s, but reflected a formula error in one cell of our spreadsheet, affecting only ~~2027~~ 2032. We found this error on 3 December 2023 and are posting a correction in accordance with our robust error-correction policy.

²⁹ The Core Community goals may well be met timely, with requisite range and capacity, by superefficient fossil-fuel-free planes using electric propulsion powered by fuel cells or batteries, as described in our Essay #5, "Flight without fossil fuel," 12 Jan 2023, https://aspensflyright.org/wp-content/uploads/2023/06/ABL-essay_5.New-fleet_11Jan2023r.pdf. The FAA doesn't allow planes not yet certified to be included in forecasts (though County

officials can and should consider them when making policy), but comes close to doing so itself: slide 16 of the Jacobsen|Daniels 20 Apr 2023 “ALP Update Aviation Demand Forecast” presented to the Airport Advisory Board (<https://pitkincounty.com/DocumentCenter/View/30817/AAB-Aviation-Forcast-Meeting-42023>) claims to include only planes “with the operational performance necessary to operate year-round at ASE,” but includes the A220-300, identified in slide 17 as the Critical Design Aircraft but not yet certified to operate at ASE.

³⁰ <https://www.aspenairport.com/modernization/airport-layout-plan/>, “Draft airport passenger forecast,” linking to Pitkin County Press Release, 21 April 2023, “Forecast for future air travel at Aspen/Pitkin County Airport released,” <https://pitkincounty.com/CivicAlerts.aspx?AID=551/>.

³¹ Forecast (ref. 30), Mid-Range, Table 18, p 33.

³² 500,406 according to the 1 Mar 2023 Terminal Area Forecast (TAF) at <https://faa.gov/sites/faa.gov/files/Forecast%20Process%20for%202022%20TAF.pdf>. FAA-funded airports are required to forecast within 10–15% of the FAA’s TAF, which is fundamentally driven by forecasts of US GDP growth and take no account of any local constraints, needs, or wishes—even in Aspen, which may have the most constrained land availability and strictest land-use controls in the country. ASE’s maximum operations per hour in good weather are also forecast in the TAF to rise from 32 to ~40 to help accommodate the extra aircraft.

³³ Aspen Fly Right’s estimate of \$15+ million/y of FBO surplus if County-owned and -directed (Essay #14, p 6 and n 28) is looking conservative. The emergency one-year Atlantic contract extension announced in Sep 2023 reportedly came with a \$13.75M payment, and the reported Atlantic offer for long-term renewal is a minimum of \$18M/y plus a \$6M signing bonus. Even \$15M/y is more than enough to finance a \$120-million terminal and other landside improvements through a conventional tax-exempt bond issue at the current cost of capital for such issuances. We’re refining that financial analysis, and suspect there’d be substantial funds left over for road-traffic improvements and airfield maintenance. Some observers think the FBO financial surplus is actually much larger, consistent with Aspen Fly Right’s estimate (Essay #3, “Runway robbery?,” 29 Dec 2022 / 5 Jan 2023, https://aspenflyright.org/wp-content/uploads/2023/06/ABL-essay_3.-FBO_dr21_29-Dec-2022rev5Jan2023.pdf, p 17) that just Atlantic’s annual net fuel-sales profit at ASE may be very roughly \$30+M/y, “comparable to twice the Airport’s entire current operating budget.” According to a CORA response and an Airport Director remark to a caucus meeting, the County doesn’t know how much Atlantic makes from the FBO, and has apparently not exercised its reported contractual right to examine the books and determine the actual surplus. Nor is a County-directed or -operated FBO impractical. As documented in Essay #3, pp 13–17, a 2018 National Academies study confirmed that a public owner/sponsor of a public-use airport can run the FBO itself or hire a contractor to do so, and that as of roughly five years ago, *1,562 US airports owned their own FBOs—three-fourths run by municipal or county governments*. Claims that Pitkin County could not possibly direct or operate its FBO thus seem unfounded. Indeed, the Jackson Hole, Wyoming airport, with some similarities to ASE and run by a former ASE Director, recently bought out its private FBO to boost revenue (Essay #3, p 16). That airport’s Director and the chair of its independent expert Board (which ASE conspicuously lacks) have offered to come tell the BOCC their experience if invited, but they haven’t been invited. It is impossible to tell whether the unexpected one-year extension of the County-Atlantic negotiation for a new FBO contract, just before it expired at the end of Sep 2023, indicates a potential shift in the County’s thinking, or some other consideration by either party.