

Comments on the Draft FAA Transition Plan to Unleaded Aviation Gasoline



Submitted via email to: 9-AVS-AIR670-AVGAS@faa.gov

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The Aviation-Impacted Communities Alliance (AICA) appreciates the opportunity to comment and submits these comments regarding the FAA Draft Transition Plan for Unleaded Aviation Gasoline. AICA is a bipartisan coalition of local and national organizations representing aviation-impacted communities across the United States. AICA advocates for aviation policy that reflects the lived experience of affected communities, reduces harmful noise and health impacts, and promotes the safe and accountable management of the National Airspace System.

These comments reflect the perspectives of aviation-impacted communities nationwide and are supported by 47 national and state or local organizations representing communities across the United States concerned about the continued use of leaded aviation gasoline and the need for a clear and implementable transition strategy.

The organizations listed below represent communities across multiple regions of the United States, most of which are located near general aviation airports and have direct experience with the environmental and public health impacts associated with leaded aviation gasoline.

Comment Submission Format

In accordance with FAA instructions, AICA's formal submission has been provided through the required comment matrix. This accompanying narrative presents the same comments in a conventional document format outside the matrix structure.

Each narrative section corresponds directly to a comment entry in the FAA Comment Matrix. In the matrix submission, the narrative Finding and Gap discussion is reflected in the Comment/Rationale column, and the Recommendation language is reflected in the Recommended Change/Proposed Rewrite column.

AICA's comments focus on structural elements necessary to achieve the elimination of leaded aviation gasoline consistent with the FAA Reauthorization Act of 2024 and the Environmental Protection Agency's endangerment determination regarding lead emissions from piston-engine aircraft.

Alignment With Related Submissions

AICA recognizes the contributions of other organizations addressing complementary aspects of the transition.

AICA supports the Earthjustice comments emphasizing the public health harms of lead exposure, the need for a firm regulatory pathway to eliminate leaded aviation gasoline by 2030, and the inclusion of affected communities as key stakeholders.

AICA also supports the Oregon Aviation Watch comments highlighting the urgency of eliminating leaded aviation gasoline, recognition of approved unleaded alternatives, and removal of barriers that could delay the transition from 100LL.

AICA also supports the Save Our Skies Alliance comments highlighting Colorado's statewide transition framework as a replicable model demonstrating how community advocacy, state leadership, and early airport adoption can accelerate the phase-out of leaded aviation gasoline ahead of the 2030 deadline.

For clarity, AICA's findings, identified gaps, and recommendations are organized in sections that follow.

These comments are submitted in addition to, and do not replace, any prior comments submitted to this docket by AICA or organizations supporting this submission.

Submitted by:

Darlene Yaplee
President and Co-Founder
Aviation-Impacted Communities Alliance (AICA)

The following national and local organizations support the AICA comments submitted regarding the FAA Draft Transition Plan for Unleaded Aviation Gasoline.

Supporting Organizations

The following organizations support the AICA comments submitted regarding the FAA Draft Transition Plan for Unleaded Aviation Gasoline:

National Organizations

Aviation-Impacted Communities Alliance (AICA)
Citizens for Quiet Skies
NextGenNoise.org
Quiet Communities, Inc.
Sky Justice National Network
The Salvador E. Alvarez Institute for Non-Violence

State/Local Organizations

350 Seattle, WA
Advocates for Viable Airport Solutions, CA

Alliance for a Regional Solution to Airport Congestion (ARSAC), CA
ATL Neighbors Needing Quiet Skies (ATLNNQS), GA
Cassell Community, CA
Citizens Against Gillespie Expansion and Low Flying Aircraft (CAGE), CA
Citizens For Airpark Safety, MD
Clow.NoNoise.CleanAir, IL
Concerned Residents of Palo Alto
FAiR Chicago, IL
Fly Safe Napa Valley, CA
Groton Ayer Buzz (MA)
King County International Airport Community Coalition (KCIACC), WA
Logan Aircraft Noise Working Group, Massachusetts
Long Beach SANER Group, CA
Los Angeles Area Helicopter Noise Coalition
Monterey Fly Safe Coalition, CA
Montgomery County Quiet Skies Coalition (MCQSC), MD
Oregon Aviation Watch, OR
Plane Sense 4 Long Island, NY
Quiet Florida, FL
Quiet Skies Boulder, CO
Quiet Skies Coalition, WA
Quiet Skies Maui, HI
Quiet Skies Over Arapahoe County, CO
Quiet Skies, AL
Santa Clara Valley Bird Alliance, CA
Save Our Skies Alliance, CO
Save Our Skies Santa Cruz, CA
Save Our Skies Los Angeles (SOSLA), CA
SeaTac Airports Community Coalition for Justice (STACC4J), WA
Sky Justice Miami, FL
Still Protecting Our Newport, CA
Stop OAK Expansion Coalition, CA
Studio City For Quiet Skies, CA
Trenton Threatened Skies Inc., NJ
Truckee Communities for a Better Airport (TCBA), CA
Twin Cities Metro Airport Neighbors for Change, MN
UproarLA, CA
Vashon Island Fair Skies, WA
Verde Valley Aviation Impact Relief, AZ

Overview of AICA Comment Structure

1. Regulatory Authority Foundation

Purpose: Establish that elimination of leaded avgas is fundamentally a regulatory responsibility and must be structured accordingly.

Sections Included:

- I. Regulatory Authority Is Made Contingent on Market Sequencing
- II. Regulatory Timing and Backstop Mechanisms Remain Undefined

2. Statutory Trigger Clarity

Purpose: Clarify the legal threshold that activates elimination under Section 770.

Section Included:

- III. Undefined Interpretation of “Generally Available” Creates Statutory Ambiguity

3. Supply Alignment with Elimination

Purpose: Ensure upstream supply policy (particularly TEL) is aligned with the elimination objective.

Section Included:

- IV. Engagement with the Tetraethyl Lead (TEL) Supplier Lacks Defined Wind-Down Parameters

4. Operational Implementation Mechanics

Purpose: Translate regulatory authority into scalable execution at the fleet and airport level.

Sections Included:

- V. Fleet Segmentation Is Not Operationalized into a Targeted Implementation Strategy
- VI. Compatibility Constraints Lack Defined Sequencing Within the Transition Strategy
- VII. Airport Infrastructure and Financing Pathways Affect Scalable Unleaded Fuel Transition

5. Demand-Side Adoption Dynamics

Purpose: Address behavioral and operational barriers that affect actual displacement of 100LL once fuel is available.

Section Included:

- VIII. Pilot Adoption Barriers at Early-Adopter Airports Limit Scalable Displacement of 100LL

6. Public Health and Scientific Grounding

Purpose: Anchor the transition in federal public health findings and scientific recommendations.

Sections Included:

IX. EPA Endangerment Findings Are Not Fully Integrated into the Transition Framework

X. NASEM Public Health Recommendations Lack Defined Execution and Accountability

7. Stakeholder Accountability Framework

Purpose: Ensure governance transparency and appropriate participation in implementation and oversight.

Section Included:

XI. The Stakeholder Framework Omits Affected Community Groups and Limits Health Advocacy Groups Participation

8. Technical Implementation Clarity

Purpose: Ensure that the transition framework clearly distinguishes fuel compatibility pathways and aircraft modification requirements, so aircraft owners, pilots, and operators understand the operational implications of approved unleaded fuels.

Section Included:

XII. Fuel Compatibility and Aircraft Modification Pathways Are Not Clearly Distinguished

AICA Comments on the FAA Draft Transition Plan for Unleaded Aviation Gasoline

I. Regulatory Authority Is Made Contingent on Market Sequencing

Finding

Section 4.1 of the draft Transition Plan states that “federal regulations will be necessary to eliminate the use of 100LL.” The Plan also identifies 2030 as the target for elimination of leaded aviation gasoline. However, the phased transition approach relies predominantly on voluntary market adoption during interim stages and does not integrate a defined regulatory pathway into the core structure of the transition framework.

In the same section, the Transition Overview states that “the marketplace will select the fuel, or fuels, that replace 100LL.” This framing treats fuel selection and transition sequencing as market outcomes rather than components of a defined regulatory framework.

Gap

While the Plan recognizes that federal regulation is necessary to complete the transition, regulatory action is framed as following voluntary market progress rather than as the governing framework of the transition architecture. This sequencing creates a structural disconnect between the acknowledged necessity of regulation and the operational design of the Plan.

If elimination requires federal regulation, the transition framework must be organized around a defined regulatory pathway rather than contingent voluntary uptake.

The FAA is currently under a statutory obligation, following EPA’s endangerment finding for lead emissions from piston-engine aircraft, to prescribe standards to control or eliminate those emissions pursuant to 49 U.S.C. §44714. Because the FAA is the only entity with the regulatory authority to eliminate leaded aviation gasoline, this statutory mandate carries a corresponding responsibility to provide clear regulatory direction sufficient to guide market behavior. Without such alignment with Congressional direction, the transition risks being structured around market sequencing rather than regulatory authority, creating uncertainty regarding the agency’s intended exercise of its statutory responsibilities. Continued uncertainty leaves airport proprietors to make infrastructure and operational planning decisions without clear federal regulatory direction.

Framing fuel selection solely as a market function obscures the role of regulatory structure in shaping transition outcomes and the FAA’s responsibility to establish the conditions necessary for elimination. Market activity can support implementation, but it cannot substitute for the regulatory framework necessary to complete elimination of leaded aviation gasoline.

Recommendation

1. Integrate a defined rulemaking schedule into the Plan’s core architecture, consistent with Section 770 of the FAA Reauthorization Act of 2024, so that regulatory action governs the transition framework rather than appearing as a later or contingent phase.
2. Align the Transition Plan’s structure with its stated recognition that federal regulation is necessary by establishing regulation as the central organizing mechanism of the transition framework.
3. Clarify that voluntary market activity is intended to facilitate orderly implementation within a defined regulatory pathway, not to determine whether or when regulatory action will occur.
4. Revise the third bullet in Section 4.1 (Transition Overview) to clarify that infrastructure policy must facilitate, rather than inadvertently constrain, an orderly transition by replacing the following language:

Current Language: “Airports should not be required to invest in additional tankage solely to accommodate the transition period.”

Replace With: “Where temporary dual-fuel availability is necessary to support an orderly transition, infrastructure requirements should be structured to minimize unnecessary burden while supporting the safe and timely elimination of 100LL.”

5. Revise the first and second bullets in Section 4.1 (Transition Overview) to align the Plan’s stated recognition that regulation is necessary with a defined regulatory pathway by replacing the following bullets:

Current Language: “Federal regulations will be necessary to eliminate the use of 100LL.”

Replace With: “Federal regulations will be established on a defined timeline to eliminate the use of 100LL, consistent with FAA’s obligations under 49 U.S.C. §44714 and the transition framework established by Section 770 of the FAA Reauthorization Act of 2024.”

Current Language: “The marketplace will select the fuel, or fuels, that replace 100LL.”

Replace With: “Within a defined regulatory framework, the marketplace may determine which FAA-approved unleaded fuel or fuels are deployed to meet compliance requirements.”

II. Regulatory Timing and Backstop Mechanisms Remain Undefined

Finding

The draft Transition Plan acknowledges that federal regulation will ultimately be required to eliminate leaded avgas but relies on voluntary market adoption during interim phases. The Plan does not establish a defined regulatory timeline or rulemaking schedule.

Gap

Without a defined regulatory timeline, the transition framework leaves the pace of progress largely dependent on voluntary market activity. This approach reduces predictability for infrastructure investment, fuel production scaling, and fleet planning. Regulatory uncertainty influences market behavior as strongly as regulatory mandates.

Federal environmental phase-outs have historically relied on defined regulatory timelines, combined with phased compliance structures, to create the certainty necessary for infrastructure investment and orderly market adjustment.

In the absence of such a defined timeline, market actors may defer capital commitments pending clearer regulatory signals. Congress addressed the conditions under which leaded aviation gasoline may be eliminated in Section 770 of the FAA Reauthorization Act of 2024, including circumstances in which airports may restrict or discontinue its use once unleaded alternatives are approved and generally available. In light of that statutory framework, the Plan should describe how the agency intends to structure the transition, rather than leaving the pace of progress primarily dependent on voluntary market activity.

Recommendation

1. Publish a defined rulemaking schedule establishing how the agency will structure the transition, consistent with the statutory framework established in the FAA Reauthorization Act of 2024, including Section 770 and the directive in 827 to facilitate the safe elimination of leaded avgas by 2030.
2. Establish a defined regulatory framework and timeline for eliminating leaded avgas, with phased compliance provisions and transitional accommodations structured within that framework.
3. Clarify that regulatory action will proceed on the established schedule independent of voluntary market uptake, while allowing phased implementation mechanisms to manage compatibility and infrastructure constraints.
4. Provide periodic public reporting on progress toward the regulatory timeline to ensure transparency and market certainty for airports, fuel suppliers, aircraft owners, and manufacturers.

5. The FAA should also establish a transparent communication framework providing regular updates on transition milestones, regulatory actions, fuel availability conditions, and implementation progress to support informed decision-making across the aviation system.
6. Clarify within the Transition Plan, Section 4.1 (Transition Overview) that the elimination timeline will be established through regulatory action rather than being dependent solely on voluntary market adoption by adding the following statement:
Add the following language to the Transition Plan: “The FAA will establish a defined regulatory timeline to eliminate the use of 100LL through rulemaking, consistent with the statutory framework established under the FAA Reauthorization Act of 2024.”
7. The FAA will establish a defined regulatory timeline to eliminate the use of 100LL through rulemaking, consistent with the statutory framework established under the FAA Reauthorization Act of 2024.

III. Undefined Interpretation of “Generally Available” Creates Statutory Ambiguity

Finding

Section 770 of the FAA Reauthorization Act of 2024 establishes conditions under which airports may restrict or prohibit the sale of leaded aviation gasoline, including when an FAA-authorized unleaded aviation gasoline becomes available at the airport. The draft Transition Plan discusses fuel approval pathways and compatibility considerations but does not clearly describe how the agency will determine when approved unleaded fuels are operationally available for purposes of implementing the transition framework.

Gap

Absent a defined interpretation of “generally available,” the statutory threshold for elimination lacks operational clarity. The term could reasonably be interpreted based on national production volume, percentage of airports offering the fuel, geographic accessibility, fleet compatibility coverage, or other criteria. Without explicit definition, stakeholders lack certainty regarding when statutory conditions are considered satisfied and how transition readiness will be determined.

This ambiguity may also affect infrastructure investment, fuel production scaling, and rulemaking sequencing, as the benchmark for sufficiency remains undefined. Ambiguity surrounding the threshold may also create opportunities for doubt regarding the safety, compatibility, or readiness of certain fuels, particularly where fuels are approved but adoption remains limited. Such uncertainty can become a practical impediment to adoption in a transition that otherwise relies on voluntary market uptake.

Recommendation

1. Publish a formal interpretation of “generally available” under Section 770, clarifying the factors the agency will use to determine when an approved unleaded fuel satisfies that statutory

condition, including considerations related to production volume, distribution, fleet compatibility coverage, and geographic availability.

2. Clarify that the determination of “generally available” is based on fuel approval status and reasonable commercial availability and is not contingent solely on voluntary airport-level adoption or market uptake.
3. Publish and maintain a publicly accessible webpage on the FAA website that clearly states the agency’s interpretation of “generally available” and provides current status determinations for each approved unleaded fuel, including the basis for those determinations.
4. Ensure that the interpretation of “generally available” is aligned with the agency’s regulatory role and does not operate in a manner that allows market sequencing to indefinitely delay elimination.
5. Clarify within the Transition Plan Section 3 (Fuel Approval and Availability Framework) the criteria used to determine when an approved unleaded aviation gasoline is considered “generally available” by adding language such as the following:

Add the following language to the Transition Plan: “An approved unleaded aviation gasoline will be considered ‘generally available’ when FAA determines that production capacity, distribution availability, and aircraft compatibility coverage are sufficient to support operational use across the national piston aircraft fleet.”

IV. Engagement with the Tetraethyl Lead (TEL) Supplier Lacks Defined Wind-Down Parameters

Finding

The draft Transition Plan references “active engagement” with the supplier of tetraethyl lead (TEL), the additive used in 100LL. The Plan does not specify whether this engagement is structured as a managed wind-down strategy consistent with the 2030 elimination objective, or as an open-ended continuity measure intended to preserve TEL supply pending market transition.

Gap

Without clearly defined parameters, engagement with the TEL supplier may be interpreted as an ongoing supply assurance mechanism rather than a transitional coordination effort. The absence of articulated wind-down conditions or alignment criteria creates uncertainty regarding how TEL supply management supports the elimination objective.

If TEL engagement is not explicitly framed within a defined sunset structure, it may dilute market and regulatory signals intended to accelerate transition to unleaded fuel.

Recommendation

1. Clarify the purpose and scope of FAA engagement with the TEL supplier, including whether such engagement is structured as part of a managed wind-down consistent with the 2030 elimination objective.

2. Publish a clear statement explaining how engagement with the TEL supplier supports the phase-out of 100LL and does not extend its use beyond 2030 or otherwise delay the transition to unleaded aviation gasoline.
3. Establish defined parameters under which TEL supply coordination will be reduced or terminated, consistent with regulatory action and transition readiness.
4. Ensure that TEL supply engagement does not operate in a manner that inadvertently delays the transition to unleaded aviation gasoline.

V. Fleet Segmentation Is Not Operationalized into a Targeted Implementation Strategy

Finding

The draft Transition Plan discusses compatibility pathways and phased transition concepts, but it does not translate fleet segmentation into a targeted implementation framework. Fixed-wing single-engine aircraft represent approximately 89 percent of the U.S. piston fleet, or roughly 208,000 aircraft. Within that segment, an estimated 55–65 percent of aircraft can already operate on currently available unleaded fuel pathways without aircraft-specific approvals, while broader compatibility may be achieved through supplemental type certificates for other approved fuels.

In addition, at least one FAA-approved unleaded aviation gasoline has received broad aircraft approval pathways and is currently available for distribution, though presently offered at limited locations. However, only 34 airports nationwide currently offer unleaded avgas, reflecting a gap between fuel availability at airports and aircraft capability to operate on approved unleaded fuels.

Gap

Without a defined early conversion priority, the transition lacks a structured mechanism for systematically identifying and resolving airport-level barriers to adoption. The Plan provides policy direction but does not establish an operational pathway for converting compatibility into scaled availability. As a result, early conversion activity remains fragmented rather than cumulative, limiting the transition's ability to build momentum toward the stated 2030 objective.

This compatible fleet segment presents an immediate opportunity for early operational conversion if implementation barriers at representative airports can be systematically identified and addressed.

In other areas of aviation innovation, the FAA has used structured pilot initiatives to accelerate implementation and generate operational data. For example, the Advanced Air Mobility Integration Pilot Program (eIPP) partners with state, local, tribal, and territorial governments and private sector participants to test operational concepts, identify implementation barriers, and generate lessons learned that inform national policy and regulatory development.

A similar operational approach should be considered to support implementation of the unleaded transition by identifying real-world infrastructure, operational, and market barriers at representative airports and translating those lessons into scalable national implementation guidance.

Recommendation

1. Explicitly identify the largest immediately compatible fleet segment as a defined early conversion focus within the broader transition framework, with priority consideration for airports with significant flight training activity due to the disproportionate emissions associated with touch-and-go operations.
2. Formally establish and publish a defined operational implementation mandate, distinct from fuel certification and policy oversight functions, focused specifically on scaling airport-level adoption.
3. Under that mandate, require a formal assessment and publication of airport-level barriers to unleaded adoption, informed by documented operational experience from airports currently offering unleaded fuel, including infrastructure constraints, capital costs, supply-chain limitations, business model risks, regulatory or grant assurance constraints, state or regional coordination factors, and other policy impediments.
4. Establish clear corrective action pathways for each identified barrier category, including assignment of responsibility, regulatory clarification, funding mechanisms, partnership models, or legislative proposals where necessary.
5. Establish a structured operational pilot initiative, informed by approaches used in programs such as the FAA’s Advanced Air Mobility Integration Pilot Program, to partner with selected airports, state or local governments, and industry participants to accelerate the deployment of unleaded aviation gasoline. The initiative should identify infrastructure, operational, supply-chain, and market barriers at representative airports and generate implementation data that can inform scalable national transition guidance.
6. Revise the fourth bullet in Section 4.1 to ensure the Transition Framework reflects a defined operational implementation mandate rather than a purely adaptive strategy by replacing the following language:

Current Language: “The National Transition Framework should be structured to be easily adapted as additional information that could impact the transition becomes available and uncertainties related to the transition are reduced.”

Replace With: “The National Transition Framework will include a defined operational implementation structure with assigned responsibilities, measurable objectives, and reporting requirements, while incorporating adaptive mechanisms that remain consistent with the statutory elimination objective.”

VI. Compatibility Constraints Lack Defined Sequencing Within the Transition Framework

Finding

A significant portion of the piston fleet remains dependent on full 100-octane capability, representing approximately 35–45 percent of the fixed-wing single-engine segment. This dependency introduces distinct compatibility, approval, and supply considerations relative to aircraft already eligible for existing unleaded fuel approvals and compatibility pathways.

While the draft Transition Plan acknowledges ongoing compatibility efforts, it does not define how different compatibility pathways are sequenced or evaluated within the transition framework. The Plan also does not clearly distinguish between different compatibility pathways, including fully compatible ‘drop-in’ fuels, fuels requiring administrative approval mechanisms, such as STCs, and fuels that may require aircraft or engine modification.

Gap

Without clearly defined compatibility thresholds, unresolved issues affecting a subset of aircraft can effectively determine the pace of the transition. The Plan does not specify how compatibility constraints are weighed in relation to broader scaling efforts, leaving uncertainty about how milestone progression will be evaluated.

Recommendation

1. Define and publish the compatibility thresholds used to evaluate transition milestones and elimination criteria.
2. Clearly define how unresolved compatibility issues will be managed in relation to transition milestones and scaling efforts.
3. Clearly document and consolidate how much of the fleet still depends on 100-octane performance, the current status of approved unleaded options for those aircraft, and any supply or market risks associated with meeting that demand as part of the transition implementation framework.
4. Ensure that compatibility issues affecting a subset of aircraft are actively monitored and managed within the transition’s implementation strategy, so they do not delay scalable progress in segments already capable of conversion.
5. Clarify within the Transition Plan the distinction between fully compatible ‘drop-in’ fuels, fuels requiring administrative approval pathways such as STCs, and fuels that may require aircraft or engine modification, and describe how each category is evaluated within the transition sequencing framework.

VII. Airport Infrastructure and Financing Pathways Affect Scalable Unleaded Fuel Transition

Finding

Airport-level infrastructure is central to scaling unleaded availability. Implementation may require tank replacement or segregation, additional fuel storage capacity, system modifications, and associated capital expenditures. While certain unleaded fuels are intended to function as fully intermixable drop-in replacements for 100LL, potentially reducing the need for segregated storage in some cases, airports may still need to manage fuel inventory, supply logistics, and transition timing as unleaded fuels scale.

In addition, approximately 1,752 of the nation's public-use airports that are not included in the National Plan of Integrated Airport Systems (NPIAS) are not currently eligible for AIP funding.

Gap

The draft Plan references infrastructure considerations yet provides limited analysis of how airport infrastructure needs associated with unleaded fuel distribution will be financed. Airports may need capital investments to modify storage systems, fueling equipment, or fuel handling practices depending on the characteristics of approved unleaded fuels and the pace of transition.

In addition, a substantial number of airports are not eligible for AIP funding, which may limit access to federal infrastructure support during the transition. Without clear identification of existing funding pathways and eligible criteria, airports may defer infrastructure investment decisions. This uncertainty may delay infrastructure planning and investment necessary to support scalable unleaded fuel availability.

As a result, infrastructure implementation may remain dependent on local financial capacity rather than a clearly defined transition pathway supported by transparent identification of existing aviation infrastructure funding mechanisms and private investment options.

Recommendation

As discussed in Section I of these comments, the Transition Plan should not assume that additional tankage or fuel storage modifications can be avoided where temporary dual-fuel availability is required during the transition.

1. Clearly define AIP eligibility for unleaded-related infrastructure within Section 5 (Infrastructure and Distribution Considerations), including tank replacement, tank segregation, fuel system modification, and associated facilities.
2. Publish guidance addressing how non-AIP airports can finance infrastructure investments associated with unleaded fuel distribution, including identification of alternative federal mechanisms, state partnerships, or necessary legislative proposals.
3. Clarify how existing federal aviation infrastructure funding programs, including AIP where applicable, may support unleaded fuel infrastructure conversion. Identify whether any statutory or administrative constraints limit the use of those existing mechanisms and describe any necessary policy clarifications or adjustments to enable their use where appropriate.

4. Provide a structured assessment of infrastructure cost exposure across representative airport categories, including examples from airports that have implemented unleaded infrastructure. The assessment should identify scalable models, common barriers, and financing approaches that support national deployment.
5. Identify whether additional Congressional authorization, targeted funding programs, or administrative flexibility are required to support infrastructure conversion consistent with the transition objective, and initiate actions to obtain such authority where necessary.
6. Clarify whether existing grant assurances, revenue-use restrictions, or nondiscrimination policies prohibit or limit airports from implementing differential pricing structures, cross-subsidization, or targeted incentives designed to accelerate displacement of 100LL, and publish formal guidance or propose policy adjustments where necessary to enable lawful transition-supportive pricing mechanisms.
7. Consistent with the recommended revision to Section 4.1 described in Section I of these comments, revise Section 5 (Infrastructure and Distribution Considerations) to clarify that infrastructure policy should support an orderly transition while minimizing unnecessary burden on airport sponsors and to clearly describe the role of federal aviation infrastructure programs in supporting the distribution of approved unleaded aviation gasoline.
8. Clarify within Section 5 (Infrastructure and Distribution Considerations) of the Transition Plan the role of federal aviation infrastructure programs in supporting the distribution of approved unleaded aviation gasoline by adding language such as the following:
Add the following language to the Transition Plan: “Existing federal aviation infrastructure programs, including the Airport Improvement Program where applicable, may support airport infrastructure investments necessary to facilitate the safe storage and distribution of approved unleaded aviation gasoline.”

VIII. Pilot Adoption Barriers at Early-Adopter Airports Limit Scalable Displacement of 100LL

Finding

Several airports currently offer approved unleaded aviation gasoline, yet pilot adoption has been inconsistent despite fuel availability and, in some cases, financial incentives. The draft Transition Plan emphasizes fuel approval, infrastructure deployment, and distribution expansion as primary components of the transition framework.

Gap

The Plan does not evaluate the factors influencing pilot adoption at airports where unleaded fuel is already available. Behavioral, informational, warranty-related, maintenance, and operational considerations may affect pilot decision-making and fuel selection, including the absence of clear FAA communication regarding the safety and compatibility of approved unleaded fuels.

Without structured assessment of these adoption dynamics, the transition framework assumes that availability will directly translate into displacement of 100LL. If adoption barriers are not identified and addressed, expanded supply alone may not produce scalable elimination consistent with the 2030 objective.

Recommendation

1. Conduct and publish a structured assessment of pilot adoption behavior at airports currently offering unleaded fuel, including identification of operational, warranty, maintenance, pricing, and perception-based barriers, as well as the clarity of FAA communication regarding the safety and compatibility of approved unleaded fuels.
2. Develop targeted strategies informed by lessons learned at early-adopter airports to address identified barriers, including clarification of airport authority to implement differential fuel pricing, incentive programs, or other mechanisms intended to encourage transition from 100LL.
3. Clarify the role of manufacturer guidance, warranty posture, and maintenance recommendations in influencing pilot uptake, and identify actions to reduce uncertainty where feasible.
4. Incorporate adoption analysis into the operational implementation framework described in Section I to ensure fuel availability results in measurable displacement of leaded avgas.

IX. EPA Endangerment Findings Are Not Fully Integrated into the Transition Framework

Finding

EPA has issued an endangerment determination regarding lead emissions from leaded aviation gasoline. The draft Transition Plan references public health considerations and acknowledges that regulation will ultimately be required to eliminate 100LL; however, it does not explicitly situate the transition within the context of EPA's determination or describe how FAA's actions align with that federal public health finding.

Gap

Absent explicit integration of EPA's endangerment determination, the Plan frames the transition primarily as a market and operational modernization effort rather than as a response to a federal public health determination. The lack of articulated interagency alignment obscures the statutory and scientific basis for elimination and may weaken the perceived urgency and regulatory foundation of the transition framework.

Recommendation

1. Explicitly reference EPA's endangerment determination regarding lead emissions from piston-engine aircraft and the resulting federal public health finding within the introductory public health context section of the Transition Plan.

2. Describe whether and how FAA’s regulatory and implementation actions are coordinated with EPA in response to EPA’s endangerment determination and the resulting obligations under the Clean Air Act.
3. Clarify the respective roles of FAA and EPA in achieving elimination of leaded aviation gasoline consistent with their respective statutory authorities under federal aviation and environmental law.
4. Incorporate periodic interagency reporting or coordination summaries that document how FAA and EPA actions remain aligned with federal public health objectives during the transition.

X. NASEM Public Health Recommendations Lack Defined Execution and Accountability

Finding

The draft Transition Plan references recommendations from the National Academies of Sciences, Engineering, and Medicine concerning lead exposure awareness, education, and interagency coordination within the GA community. The Plan acknowledges the importance of public health considerations in the transition away from leaded aviation gasoline.

Gap

While the Plan references NASEM recommendations, it does not define an execution framework for implementing them. The Plan does not specify which FAA office is responsible for developing and overseeing education and outreach activities, does not establish timelines for implementation, and does not identify measurable performance indicators or reporting mechanisms.

In addition, the Plan does not define qualitative standards for educational content, review processes, or mechanisms to ensure that materials are integrated into training curricula, manuals, certification testing, and airport guidance in a meaningful and sustained manner.

As a result, public health education and awareness commitments risk being referenced without defined accountability, measurable outcomes, or quality controls.

Recommendation

1. Designate and publish the FAA office responsible for implementation of NASEM-related education and outreach activities, including defined timelines and reporting requirements, within the education and outreach implementation framework described in the Transition Plan.
2. Establish measurable implementation milestones for public health education, including integration into FAA training materials, certification standards, advisory circulars, and airport sponsor guidance, within the education and outreach implementation framework described in the Transition Plan.

3. Develop qualitative standards for educational content to ensure materials are scientifically accurate, operationally relevant, and meaningfully incorporated into training and operational guidance rather than limited to informational publication.
4. Establish a stakeholder review mechanism, including representation from public health and affected community groups, to evaluate the adequacy and effectiveness of education materials prior to and following deployment.
5. Provide periodic public reporting on implementation progress and content updates.

XI. The Stakeholder Framework Omits Affected Community Groups and Limits Health Advocacy Groups Participation

Finding

Table 14 of the draft Transition Plan identifies stakeholder categories including industry associations, fuel developers, OEMs, flight schools, pilots, fuel distributors, airports/FBOs, government entities, health advocacy groups, and standards bodies.

The table does not include a category for organizations representing communities affected by aviation emissions.

For certain stakeholder categories, particularly industry, aviation, and airport associations, Table 14 identifies roles that include collaboration with the FAA in transition implementation activities, such as defining responsibilities, timelines, and training frameworks.

The role assigned to “Health Advocacy Groups” describes education, outreach, and advocacy activities directed toward the public, and does not describe any role involving engagement with the FAA regarding transition implementation activities.

Gap

The elimination of leaded aviation gasoline is grounded in public health and community exposure considerations. However, the stakeholder framework does not include organizations representing communities directly affected by aviation emissions.

In addition, the framework does not describe how health advocacy organizations are engaged in the transition process itself.

As a result, organizations representing affected communities and public health perspectives are not integrated into the engagement structure associated with transition implementation.

Education, outreach, and advocacy are important public health functions. However, without a defined participatory role in implementation activities, public health perspectives may not be incorporated into transition decision-making.

Recommendation

1. Add the following New Row to Table 14:
Stakeholder (new row): “Affected Community Groups (excluding local, state, Tribal, and federal governmental entities)”
Role (new row): “Collaboration with FAA on operational implementation planning.”
“Participation in development and review of education and public health materials.”
“Provide input on transition progress reporting.”
2. Revise the existing “Health Advocacy Groups” row as follows:
Current Language: “Education, outreach, and advocacy”
“Publish/advocate lessons learned and best practices”
Replace With: “Collaboration with FAA on operational implementation planning.”
“Participation in development and review of education and public health materials.”
“Provide input on transition progress reporting.”
3. Add the following sentence immediately following Table 14 in the stakeholder framework narrative: “Stakeholder engagement will include defined consultation processes for health advocacy and affected community groups throughout transition implementation, including documentation of input received and agency response.”

XII. Fuel Compatibility and Aircraft Modification Pathways Are Not Clearly Distinguished

Finding

The draft Plan discusses compatibility considerations and aircraft approval pathways associated with the introduction of unleaded aviation fuels. The Plan references aircraft eligibility mechanisms and compatibility considerations for certain unleaded fuels.

Gap

The Plan does not clearly distinguish between compatibility pathways that may apply to approved unleaded fuels. In particular, it does not differentiate between fuels that are fully compatible with existing aircraft and engines without modification, fuels requiring administrative approval mechanisms such as Supplemental Type Certificates (STCs) that may represent eligibility approval without requiring physical aircraft or engine modification.

Without clear differentiation between these pathways, aircraft owners, pilots, and operators may lack clarity regarding the operational implications of transitioning to unleaded fuels. Ambiguity regarding potential aircraft modifications, warranty implications, or future compatibility requirements can contribute to hesitation among aircraft owners and operators.

Clear communication of compatibility pathways is important to ensure operational decisions are informed by an accurate understanding of fuel eligibility requirements rather than assumptions about modification complexity or cost.

Recommendation

1. Clarify within the Plan the distinction between different compatibility pathways that may apply to approved unleaded fuels, including fully compatible “drop-in” fuels that require no aircraft modification, fuels requiring administrative approval mechanisms such as Supplemental Type Certificates (STCs) that may represent eligibility approval without requiring physical aircraft modification, and fuels that may require aircraft or engine modification.
2. Provide clear explanation of the operational implications associated with each pathway, including whether physical aircraft or engine modification is required or whether approval mechanisms represent administrative eligibility determinations.
3. Ensure that compatibility pathways are communicated clearly to aircraft owners, pilots, maintenance providers, and airports to reduce uncertainty and support informed adoption decisions as unleaded fuels become available.