

Commercial Aviation Coordinating Commission

Online virtual meeting

DAVID FLECKENSTEIN
Commercial Aviation Coordinating Commission Chair
October 21, 2020

Agenda

Welcome

Updates to Staff Work

Public Comment Period and Summary of Comments Received

Environmental Presentations

- **FAA Scope and process**
- **What does WSDOT consider at the planning level**
- **WSU Sustainable Aviation Fuel & Noise Mitigation Presentations**

BREAK

Workbook Feedback

- **Planning Staff's Recommendations**
- **Time Extension Factors**
- **Recommendations to the Legislature in 2021**
- **Feedback on Evaluation Criteria**
- **Feedback on Guiding Principles**

Commission Member Round Table Discussion

Next Steps

Updates to Staff Work

- ✓ Informational briefings continued
- ✓ Request for use of on call communicators submitted and approved
- ✓ Workbook #4 provided to commission members
- ✓ Collaboration with engineering firms regarding demand for passenger service, air cargo, and general aviation.
- ✓ Letters from City of Lakewood, City of Tacoma, and Futurewise provided to CACC members
- ✓ List of near-term recommendations
- ✓ Input provided on timeline extension
- ✓ Guest speaker work added to meet member requests for information

Public Comments

- **2 min per speaker**
- **Christina Crea has the speakers organized**
- **Once the comment period ends, members of the public can make comments in the chat box**
- **Please do not interrupt the meeting once the live comment periods ends**
- **Send additional comments to CACC@wsdot.wa.gov**
- **Thank you for your participation**

Airport Planning

Presented by:
Valerie Thorsen, Lead Planner, Airports Regional
Office
Date: October 21, 2020



**Federal Aviation
Administration**

Overview

- **FAA process**
- **Airport Master Plan**
- **Feasibility Study**
- **Site Selection Study**



Options



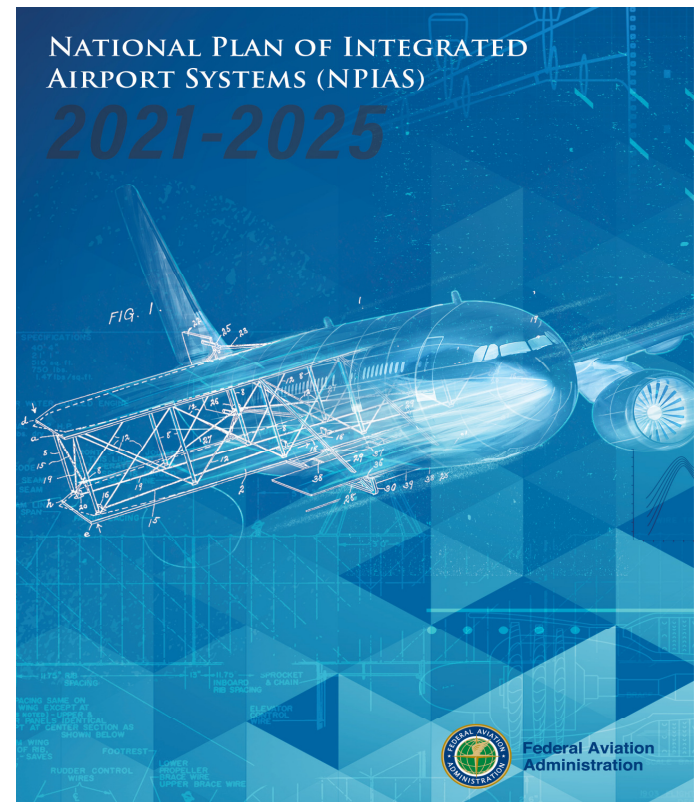
FAA Process

- **Establishing the need**
- **Selecting a site**
- **Implementation**



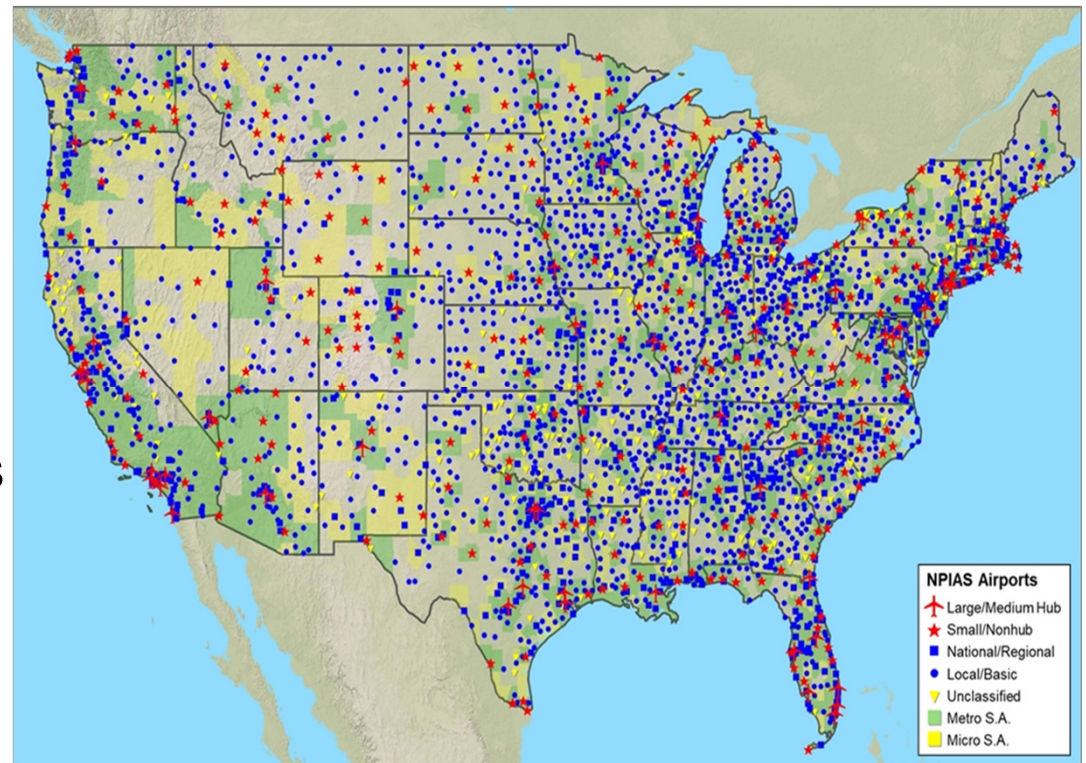
Overview of the NPIAS

- **The Secretary is required by statute to:**
 - Maintain a plan for developing public use airports that are important to the national transportation system
 - Publish the NPIAS every other year



Overview of the NPIAS

- **The Plan:**
 - Identifies airports that are eligible for Airport Improvement Program (AIP) funding
 - Identifies AIP eligible development costs over 5 fiscal years
 - FY 2021-2025
 - 3,304 Existing Airports
 - 6 Proposed Airports



Existing NPIAS Airport

- **Airline commitment***
- **Airport master plan update**
- **Implementation**



Airport Master Plan Elements

- **Airfield Inventory**
- **Forecast of Aviation Activity**
- **Facility Requirements**
- **Alternatives Analysis**
- **Airport Layout Plan**
- **Airport Capital Improvement Plan**



Airport Master Plan Elements

- **Airfield Inventory**
 - History of the airport
 - What facilities exist
 - Condition of existing facilities
 - Examine the regional setting of an airport and the land use patterns around it
 - Summarize an airport's financial resources



Airport Master Plan Elements

- **Aviation Forecast**
 - Types of aviation activity
 - Operations by aircraft type
 - Drives future infrastructure needs
 - Federal approval



Airport Master Plan Elements

- **Facility Requirements**

- Assess the ability of existing facilities to meet current and future demand
- Identify requirements for new or expanded facilities



Airport Master Plan Elements

- **Alternatives**
 - Options to meet projected facility requirements
 - Select a recommended alternative



Airport Master Plan Elements

- **Airport Layout Plan (ALP)**
 - Graphic representation of the long-term development plan
 - Required for every airport in the NPIAS



Airport Master Plan Elements

- **Implementation Plan**
 - Summary description of recommended improvements and associated costs
- **Financial Feasibility Analysis**
 - Identify the financial plan for the airport
- **Capital Improvement Plan (CIP)**
 - FAA funding requests



Airport Master Plan Elements

- **Environmental Considerations**

- Noise impacts to community
- Rare/endangered species
- Wildlife hazards
- Historic resources
- Natural resources
- Greenhouse gases
- Clean Air Quality
- Recycling
- Sustainability



Greenfield Site

- **Airport Feasibility and Site Selection Study**
 - Examine existing airport(s) and regional conditions
 - Justification: why is a new airport needed (capacity, safety, standards, etc.)
 - Facility needs: forecasts, infrastructure requirements, land use
 - Identification of potential sites
 - Preliminary site evaluation: initial review of topography, approach clearances, transportation access, community, environmental, development costs, benefits, etc



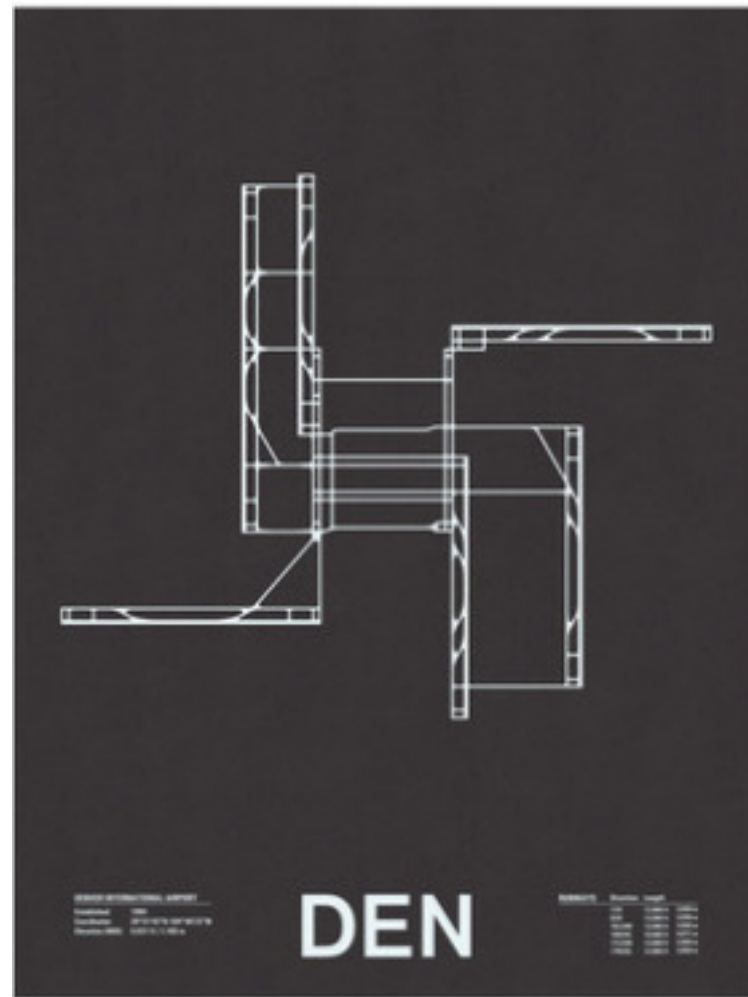
Greenfield Site

- **Determination of sponsor eligibility and inclusion in the NPIAS**
 - Must be completed before any federal funding can be provided
- **Master Plan**
- **Benefit-Cost Analysis (BCA)**
 - Required for a new airport or a capacity project needing \$10 million or more in AIP



Greenfield Site

- **NEPA Analysis**
- **Design**
- **Construction**



Summary

- **Existing NPIAS Airport**

1. Airline commitment*
2. Airport Master Plan
3. NEPA analysis
4. Design
5. Construction

- **Greenfield Site**

1. Eligible sponsor
2. Inclusion in NPIAS
3. Airline commitment*
4. Airport Master Plan
5. NEPA Analysis
6. Design
7. Construction



National Environmental Policy Act (NEPA): Why and How We Do It

Presented by:
Janell Barrilleaux, Environmental Program
Manager, Airports Regional Office
Date: October 21, 2020



**Federal Aviation
Administration**

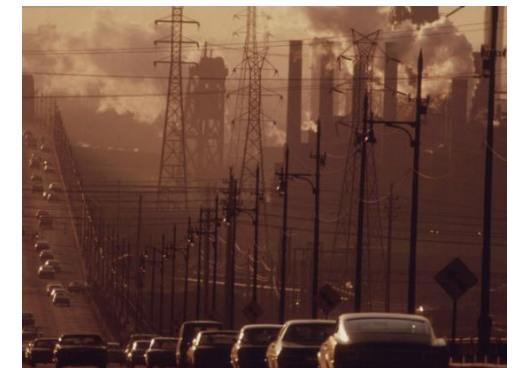
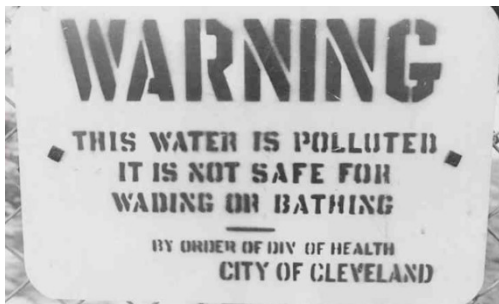
Overview



- **Why NEPA?**
- **When is NEPA triggered?**
- **How do we comply with NEPA?**

Why NEPA?

- Beginning in the late 1950s, the public became increasingly aware and concerned about impacts human activity had on the environment.



As a Result....

- **National Environmental Policy Act - 1969**
- **Clean Air Act - 1970**
- **First Earth Day - 1970**
- **Environmental Protection Agency (EPA) established - 1971**
- **Clean Water Act (CWA) amended - 1972**



NEPA IS:

- **National Policy on Protecting the Environment**
- **“Procedurally Rich”**
- **Requires Federal Agencies to evaluate environmental effects of their actions **BEFORE** making decisions on those actions**
 - What are they doing? Why? What alternatives were considered? What are the effects?
 - Document their analysis
 - Disclose the effects of their actions



NEPA DOES NOT:



- Place environmental concerns above all other factors
- Prohibit adverse effects
- Stop needed projects
- Generate mountains of useless paperwork



Federal Actions that Trigger NEPA for FAA Airports Division

- **Federal Funding**

- Airport Improvement Program



- **Federal Approval**

- Land Release (Release AND foreseeable use)
- Airport Layout Plan (ALP) changes





- Airport & Airway Improvement Act
- Aviation Safety & Noise Abatement Act
- Clean Air Act
- Clean Water Act
- Coastal Barrier Resources Act
- Coastal Zone Management Act
- Consultation with Tribal Governments
- Department of Transportation Section 4(f)
- Endangered Species Act
- Environmental Justice
- Federal Water Pollution Control Act
- Fish & Wildlife Conservation Act
- Floodplain Management
- Hazardous Wildlife Attractants
- Migratory Bird Treaty Act
- National Historic Preservation Act
- Pollution Prevention Act
- Protection of Wetlands
- Safe Drinking Water Act
- Uniform Relocation Assistance & Real Property Acquisition Policies Act
- Wetlands
- Wild & Scenic Rivers Act

• ***And Many, Many More***

Resource Categories

- **Air quality**
- **Biological resources (including fish, wildlife, and plants)**
- **Climate**
- **Coastal resources**
- **Department of Transportation Act, Section 4(f)**
- **Farmlands**
- **Hazardous materials, solid waste, and pollution prevention**
- **Historical, architectural, archeological, and cultural resources**
- **Land use**
- **Natural resources and energy supply**
- **Noise and compatible land use**
- **Socioeconomics, environmental justice, and children's environmental health and safety risks**
- **Visual effects (including light emissions)**
- **Water resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)**



Three Levels of Environmental Review

- **Categorical Exclusion (CATEX)**
- **Environmental Assessment (EA)**
 - Finding of No Significant Impact (FONSI) or FONSI/Record of Decision (ROD)
- **Environmental Impact Statement (EIS)**
 - Record of Decision (ROD)



Categorical Exclusions

- **Actions that do not individually or cumulatively impact the natural/human environment**
- **Only Applies to projects:**
 - Listed in FAA's Order 1050.1F
 - Do not involve Extraordinary Circumstances:
 - Adversely effect an historic property or a Section 4(f) property
 - Impact natural, ecological, or scenic resources of significance
 - Noise, air quality, or water quality impacts
 - Disrupt an established community
 - Controversy on environmental grounds
- **Requirements for various special purpose laws still need to be met regardless of document type**

Environmental Assessment

- **Purpose of an EA is to determine if a project has the potential to significantly affect the environment**
- **Appropriate for projects that:**
 - Do not qualify as a CATEX
 - Qualifies as a CATEX but includes Extraordinary Circumstances
 - Normally requires an EA
- **Concludes with the issuance of a FONSI or FONSI/ROD**

Environmental Impact Statements

- **An EIS is required if:**
 - Normally requires an EIS
 - Significant impacts are anticipated or
 - An EA identifies a significant environmental impact and mitigation does not reduce impact below applicable thresholds
- **Formal process that requires intensive interaction with interested and affected parties**

An EA/EIS Must Contain:

- **Proposed Action** 
- **Purpose and Need**  **Planning!!**
- **Alternatives** 
- **Affected Environment**
- **Environmental Consequences**

Sufficient detail in terms that are understandable to individuals who are not familiar with aviation or commercial aerospace activities

Public Involvement

- **For projects that qualify as a CATEX:**
 - Public notice is not required
 - However, requirements for public notice for certain Special Purpose Laws may trigger the need to do a public notice of availability.
- **EA:**
 - Opportunity for public comment on the draft
 - Include Section 106 finding and other required notices (wetland, 4(f), Endangered Species Act, etc.) within the legal notice
- **EIS:**
 - Public Scoping
 - The public must be provided an opportunity to review and comment on draft EIS's
 - Final EIS should address all comments received

Other Resources

- **FAA Order 1050.1F & Desk Reference**
 - Applies to entire agency
 - 1050.1F provides information on how the FAA implements NEPA
 - Desk Reference provides information on the various resource categories
- **FAA Order 5050.4B & Desk Reference**
 - Applies specifically to the Airports Division of FAA

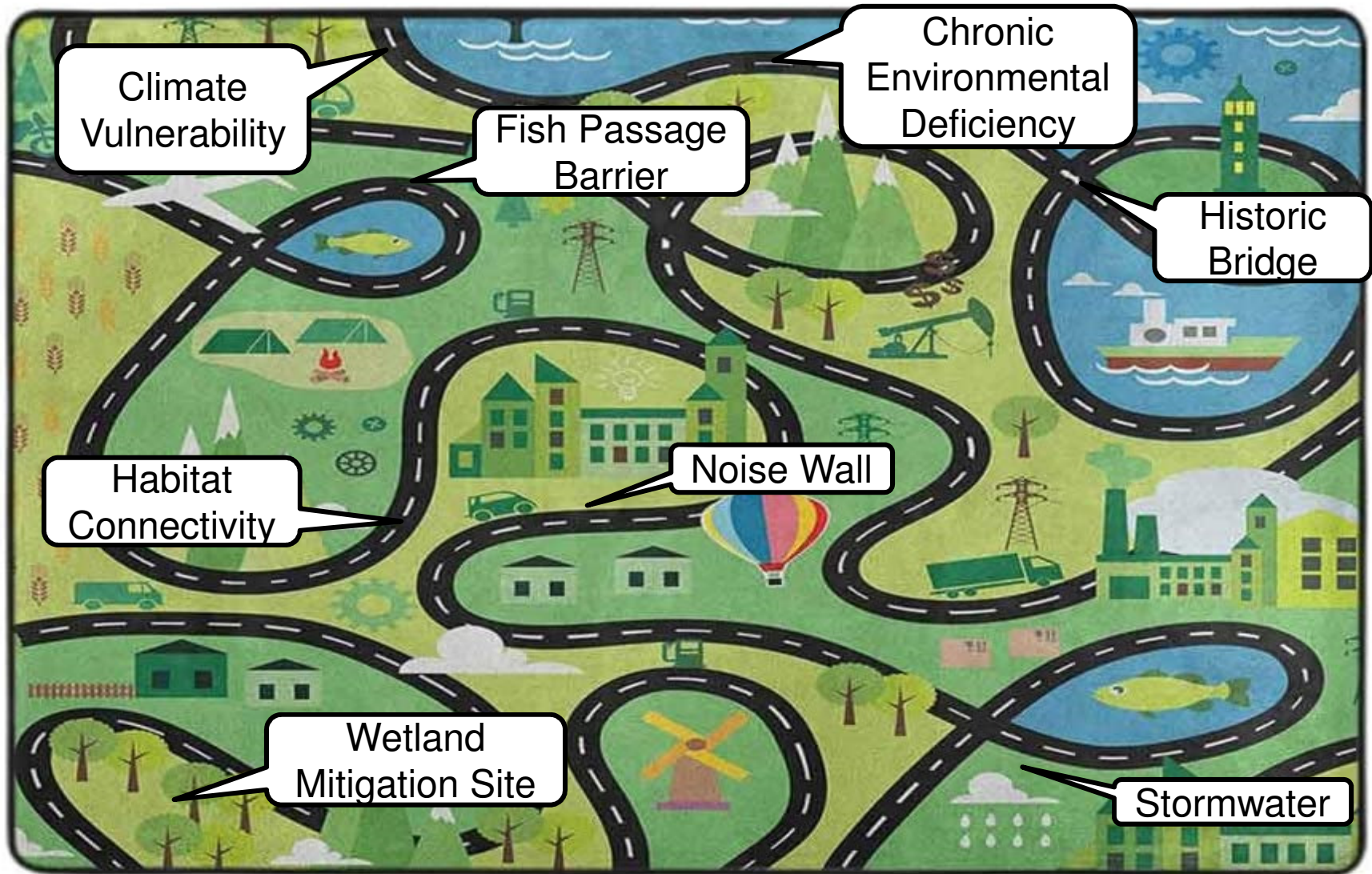


Questions?



Carol Lee Roalkvam
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WSDOT Environmental Services Office
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What does WSDOT consider at the planning level



FAA CENTER OF EXCELLENCE FOR ALTERNATIVE JET FUELS & ENVIRONMENT

Sustainable Aviation Fuels

Opportunities for Washington State

Presenters: Carol Sim, Michael Wolcott
Washington State University

Presented to: Washington Commercial Aviation Continuity Commission
Virtual Meeting
October 21, 2020

This research was funded by the U.S. Federal Aviation Administration Office of Environment and Energy through ASCENT, the FAA Center of Excellence for Alternative Jet Fuels and the Environment Any opinions, findings, conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the FAA.



FAA CENTER OF EXCELLENCE FOR ALTERNATIVE JET FUELS & ENVIRONMENT

ASCENT Noise Research

Carol Sim: Washington State University

Washington Commercial Aviation Coordinating Commission
Virtual Meeting

October 21,2020

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Break!

Discussion of Recommendations

Near Term
Recommendations

Longer Term
Recommendations

Legislative
Recommendations

Planning Staff Near-Term Recommendations

“Recommendations to the legislature on future Washington state long-range commercial aviation facility needs...to meet anticipated commercial aviation, general aviation, and air cargo demands;”

- **Support legislation to adjust the timeline of the CACC from 2022 to 2024.**
 - *Make allowances for the Chair of the CACC to recess the commission while the Aviation System Plan Update gathers additional information for the commission's use.*
 - *Allow the CACC to explore adding air cargo capacity at Boeing Field. (Currently, King County is excluded from any CACC recommendations)*

Planning Staff Near-Term Recommendations

- Provide the Legislature with a “soft” list of 6 potential sites, that may be subject to change

Planning Staff Near-Term Recommendations

- Propose phased implementation to meet near-term demand utilizing 2-3 existing airports (most resilient path)

Planning Staff Near-Term Recommendations

- **Support the continuation of the revolving airport loan program and the Community Aviation Revitalization Board**

Planning Staff Long-Term Recommendations

- Recommend furthering the development and use of Sustainable Aviation Fuel

Planning Staff Long-Term Recommendations

- Continue the efforts of the Electric Aircraft Working Group (EAWG) and WSDOT's overall efforts in emerging aerospace technology

Planning Staff Near-Term Recommendations (Summary)

- Provide the Legislature with a “soft” list of 6 potential sites, that may be subject to change
- Propose phased implementation to meet **near term** demand utilizing 2-3 existing airports (most resilient path)
- Support legislation to adjust the timeline of the CACC from 2022 to 2024.
 - Make allowances for the Chair of the CACC to recess the commission while the Aviation System Plan Update gathers additional information for the commission’s use.
 - Allow the CACC to explore adding air cargo capacity at Boeing Field. (Currently, King County is excluded from any CACC recommendations)
- Support the continuation of the revolving airport loan program and the Community Aviation Revitalization Board

Planning Staff Long-Term Recommendations (Summary)

- Recommend furthering the development and use of Sustainable Aviation Fuel
- Continue the efforts of the Electric Aircraft Working Group (EAWG) and WSDOT's overall efforts in emerging aerospace technology

Time Extension Considerations

- Why?
 - Public engagement is hindered by real constraints as a result of the pandemic
 - Air passenger demand has fallen
 - Air cargo demand has increased
 - Passenger demand is expected to return and surpass 2019 levels
 - Some segments are difficult to predict
 - Additional technical analysis needed to offer informed recommendations

Technical Analysis Factors

Areas where we have insufficient information and uncertainty may require more in-depth analysis

Commercial Aviation

- No greenfield site has emerged
- Expansion of **existing** airports to accommodate both passenger and cargo commercial aviation demand likely to require four or more airports
- Passenger and cargo air carriers need to be close to population centers
- Some possible sites unlikely to meet air carrier and passenger/shipper needs

Technical Analysis Factors

General Aviation

- GA aircraft storage demand already exceeds supply in several locations
- GA aircraft storage demand projected to increase
- Highest/best use of existing airports has the potential to displace GA in some locations
- Revolving loan fund, a key funding source for hangars, is set to expire

Technical Analysis Factors

Environmental Interests

- Jet-A fuel likely to remain for the foreseeable future
- Advancement of Sustainable Aviation Fuel (SAF) requires legislative and industry support
- Noise mitigation strategies need further development and implementation strategy
- Electric and alternate propulsion aviation sector still emerging/evolving

Technical Analysis Factors

Other Factors

- High-speed rail potential to connect to airports
- Increased airspace congestion possible, requiring concepts and strategies
- Increased road congestion likely with current infrastructure, requiring strategies and budget estimates

How we will use the extra time

- Additional time will allow better engagement with the public post-pandemic
- The planning team will continue to work to identify a possible greenfield site
- A portion of the Aviation System Plan Update may include a team of consultants with the technical expertise to address these topics:
 - Passenger air service estimates and operations factors
 - Air Cargo operations factors
 - General Aviation storage development parameters
 - Road analysis, conceptual project development and rough cost estimates
 - Airspace capacity analysis and possible routing solutions
 - Airport improvement project concept development and rough costing
 - Sustainable aviation fuel advancement strategies
 - Electric and alternate propulsion airport infrastructure project development

Time Extension

Comments from Legislators

Recommendations to the Legislature in 2021

- **Initial list of six possible sites** – a soft list: subject to change
 - Arlington, Bremerton, Everett/Paine Field, Shelton/Sanderson Field, Tacoma Narrows, Toledo
 - Additional input regarding:
 - ❖ Olympia (currently lacks sponsor support)
- **Propose phased implementation to meet near-term demand utilizing 2-3 existing airports (most resilient path)**
- **Support extension of the CACC timeline from 2022 to NLT 2024**
- **Fund and solidify the airport revolving loan program (CARB)**

Round Table Discussion

Evaluation Criteria

Commission Member Input

- Most evaluation criteria received Commission Member support of 78% and above
- Summary of comments Commission Members provided:
 - “Balance the limitations of mitigation and issues that can't be mitigated properly”
 - “Focus on ‘fatal flaw’ environmental factors and not try to accomplish project-level assessment or mitigation”
 - “Consider available land to add a runway rather than an existing 2nd runway”
 - “Consider land acquisition and land use factors”
 - “Consider infrastructure availability and cost”
 - “Consider combining measures that address adding capacity”

Feedback on Guiding Principles

- Commission members provided input on elements of guiding principles
- Commission Members indicated general support for proposed guiding principle elements
- Some elements of the principles received strong support:
 - Noise, light, water, soil, air, vibration
 - Aircraft/airport noise mitigation possibilities
 - Federal budget parameters
 - State budget parameters
 - Enhanced mobility of people
 - Congestion mitigation
 - Enhanced trade and economic development
 - More efficient energy use

Guiding Principle Presentations

- The planning team suggested possible informational presentations on guiding principles to provide Commission Members with up-to-date information on the topics
- Commission Members generally supported the proposed list of topics
- Commission Members provided a few recommendations on additional informative presentations.
- The planning team will develop a schedule of topics and speakers for the Commission
- Some presentations could take place as a live and recorded webinar, separate from regular Commission meetings

Next Steps

- Through a written report, provide the “soft” list of initial six (6) sites to the House and Senate Transportation Committees along with the near-term recommendations for the aviation system
- Begin work with the FAA to develop an agreed upon scope of work for the 2022 Washington Aviation System Plan Update
- Establish a contract through WSDOT’s pre-approved list of on-call communicators to enhance public outreach
- Continue to develop methods and presentations to ensure ample consideration of the guiding principles in making recommendations
- Plan for a February CACC meeting

For additional information regarding the
Commercial Aviation Coordinating Commission,
please visit:

www.wsdot.wa.gov/aviation/commission/home.htm