



**Technical Advisory
Committee
Meeting #1**

Introductions



Brandon Rakes
Airport Director

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Assistant Project Manager/Lead Planner

THE AGENDA



1. **What is an Airport Master Plan**

2. **Your Role as the Technical Advisory Committee (TAC)**

3. **Master Plan Schedule**

4. **Public Involvement Plan**

5. **Airport Existing Conditions**

6. **User Survey Results**

7. **Airport SWOT Analysis & Discussion**

8. **Emerging Aviation**

9. **Next Steps**

What is an Airport Master Plan?

A master plan's purpose is not to solve the airport's management, operations, or maintenance issues.



According to the Federal Aviation Administration (FAA), an airport master plan is...

A comprehensive study of an airport that usually describes the short-, medium-, and long-term development plans to meet future aviation demand.

Follows FAA Advisory Circular 150/5070-6B

- What's Included
 - Inventory
 - Forecast
 - Facility Requirements
 - Alternatives
 - Airport Layout Plan
 - Capital Improvement Plan

FAA Grants



Fiscal Year	Project Description	Grand Total
FY 2005	Construct Access Road	\$142,470
FY 2005	Construct Taxiway	\$457,121
FY 2005	Rehabilitate Runway	\$5,000
FY 2006	Construct Taxiway	\$164,451
FY 2006	Install Weather Reporting Equipment	\$132,563
FY 2006	Rehabilitate Taxiway	\$575,957
FY 2008	Acquire Land For Approaches	\$244,586
FY 2009	Acquire Land For Approaches	\$94,695
FY 2010	Rehabilitate Runway	\$35,000
FY 2011	Acquire Snow Removal Equipment	\$75,000
FY 2011	Install Perimeter Fencing	\$84,632
FY 2013	Construct Snow Removal Equipment Building	\$85,200
FY 2013	Rehabilitate Runway	\$6,000
FY 2015	Construct Taxiway	\$89,900
FY 2015	Rehabilitate Apron	\$128,485
FY 2016	Rehabilitate Apron	\$940,346
FY 2018	Reconstruct Taxiway	\$2,598,521
FY 2020	CARES Act Funds	\$69,000
FY 2021	CRRSA Act Funds	\$23,000
FY 2021	Seal Runway Pavement Surface/Pavement Joints	\$238,790
FY 2021	Seal Taxilane Pavement Surface/Pavement Joints	\$527,810
FY 2021	Seal Taxiway Pavement Surface/Pavement Joints	\$177,777
FY 2022	General ARPA	\$59,000
		\$6,955,304

Regular Master Plan Updates are required to continue to be eligible for FAA Grants.

Your Role on the Technical Advisory Committee (TAC)



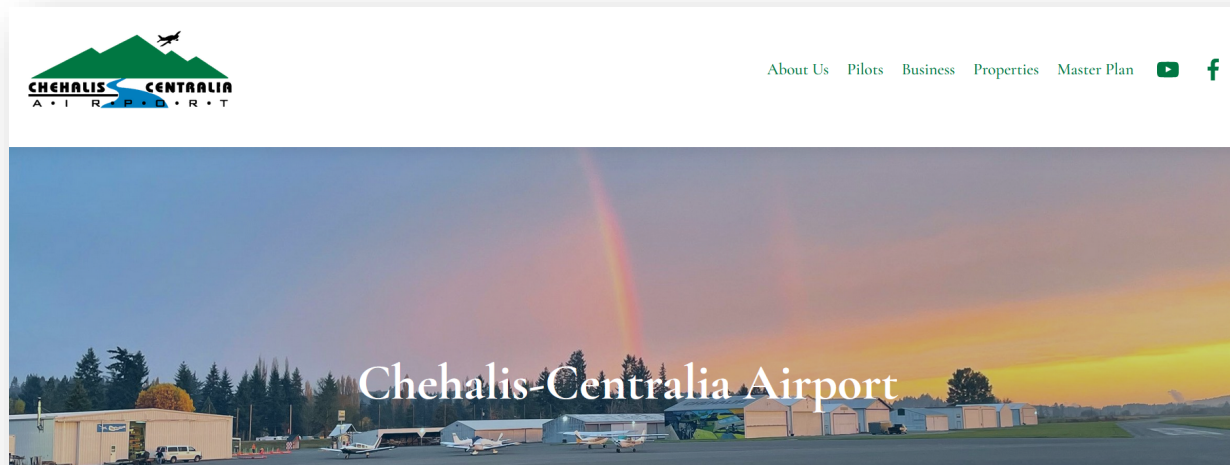
- Responsible and representative input is very important to the success of the Master Plan Update
- Limited time commitment: 3 meetings
- Review Draft Report and provide feedback with an eye towards your organization/business
- Provide suggestions **AT ANY TIME**



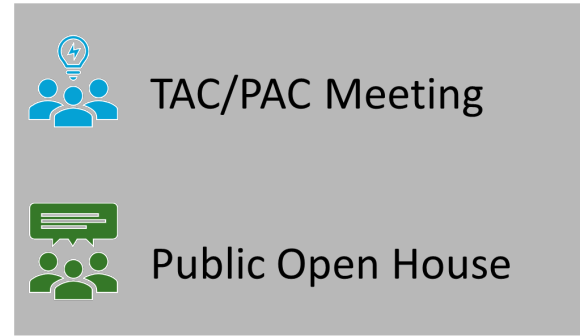
Public Involvement Plan





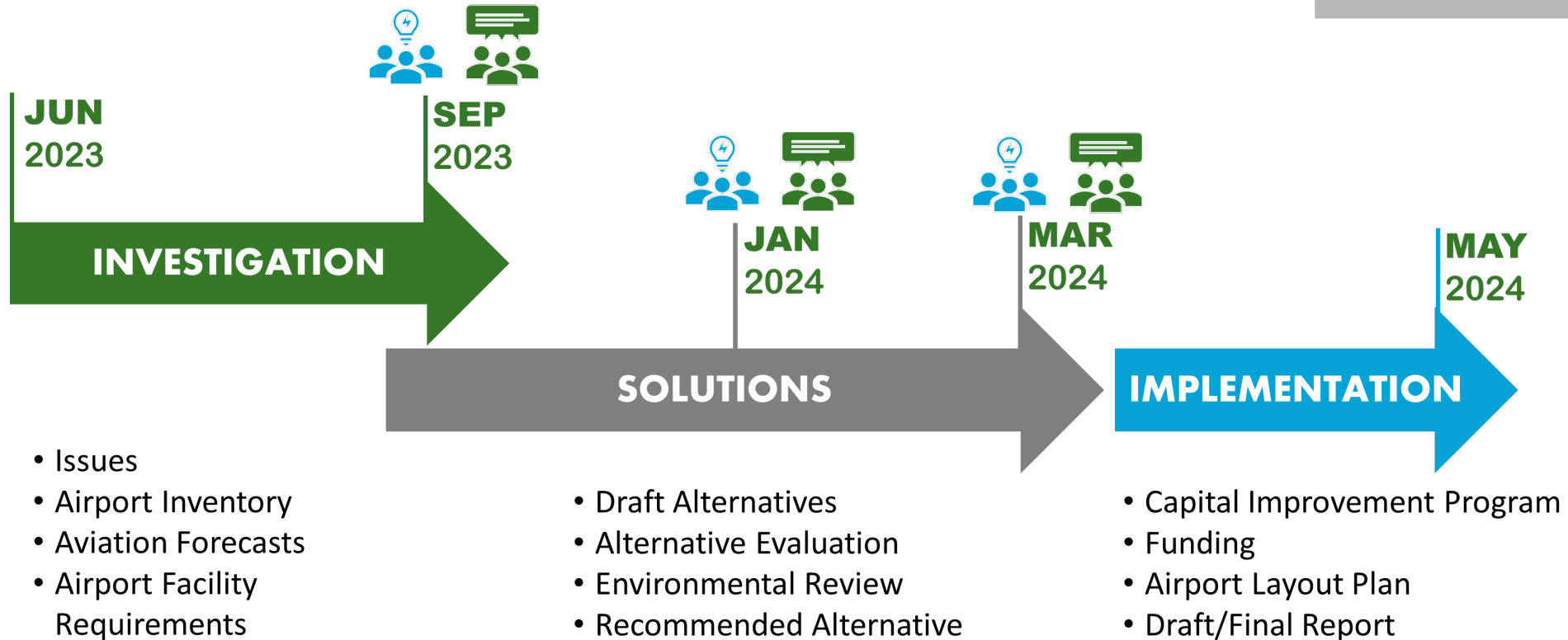
- NEW CLS website – www.ChehalisCentraliaAirport.com
 - Master Plan newsletter sign up
- User Survey
- 3 Technical Advisory Committee (TAC) Meetings
- 3 Public Advisory Committee (PAC) Meetings
- 3 Public Open Houses
- Comments accepted throughout
- Feedback from TAC/PAC ongoing



Schedule



-  TAC/PAC Meeting
-  Public Open House



Airside Existing Conditions

- **Runway:** 16/34
 - Medium Intensity Runway Lighting (MIRL)
- **Taxiway:**
 - **A:** 35'-50' wide - reflectors
 - **T-04:** 35' wide – reflectors
 - **Taxiway Connectors:**
 - **A1:** 35' wide - reflectors
 - **A2:** 30' wide - reflectors
 - **A3:** 35' wide - reflectors
 - **A4:** 140' wide – reflectors
 - **A5:** 35' wide - reflectors



Existing Runway Conditions

Item	Runway 16	Runway 34
Design Group		
Aircraft Approach Category:	Category B	
	Approach speed 91 knots but less than 121 knots.	
Airplane Design Group	Group II	
	Tail height 20'-<30'; wingspan 49'-<79'	
Orientation	SE	NW
Length	5,000 feet	
Width	140 feet	
Surface Type	Concrete	
Weight Capacity	Single/Double Wheel: 30,000 lbs.	
	Double Tandem: 85,000 lbs.	
Lighting	Medium Intensity Runway Lighting (MIRL)	
Pavement Markings	Nonprecision	Basic Visual
Traffic Pattern	Right	Left
Runway End Identifier Lights (REIL)	Yes	Yes
Visual Slope Indicator	4 Light Precision Approach Path Indicator (PAPI)	2 Box Visual Approach Slope Indicator (VASI)

RUNWAY 34



Aircraft Design Classification

Aircraft Approach Category

A	Approach speed less than 91 knots.
B	Approach speed 91 knots but less than 121 knots.
C	Approach speed 121 knots but less than 141 knots.
D	Approach speed 141 knots but less than 166 knots.
E	Approach speed 166 knots or more.

- Runways are designed to accommodate aircraft based on their approach speed and wingspan.
- Combined, these help us determine the geometry of the airfield.

Airplane Design Group

#	Tail Height [ft.(m)]	Wingspan [ft.(m)]
I	<20' (<6m)	<49' (<15m)
II	20' - <30' (6m - <9m)	49' - <79' (15m - <24m)
III	30' - <45' (9m - <13.5m)	79' - <118' (34m - <36m)
IV	45' - <60' (13.5m - <18.5m)	118' - <171' (36m - <52m)
V	60' - <66' (18.5m - <20m)	171' - <214' (52m - <65m)
VI	66' - <80' (20m - <24.5m)	214' - < 262' (65m - <80m)

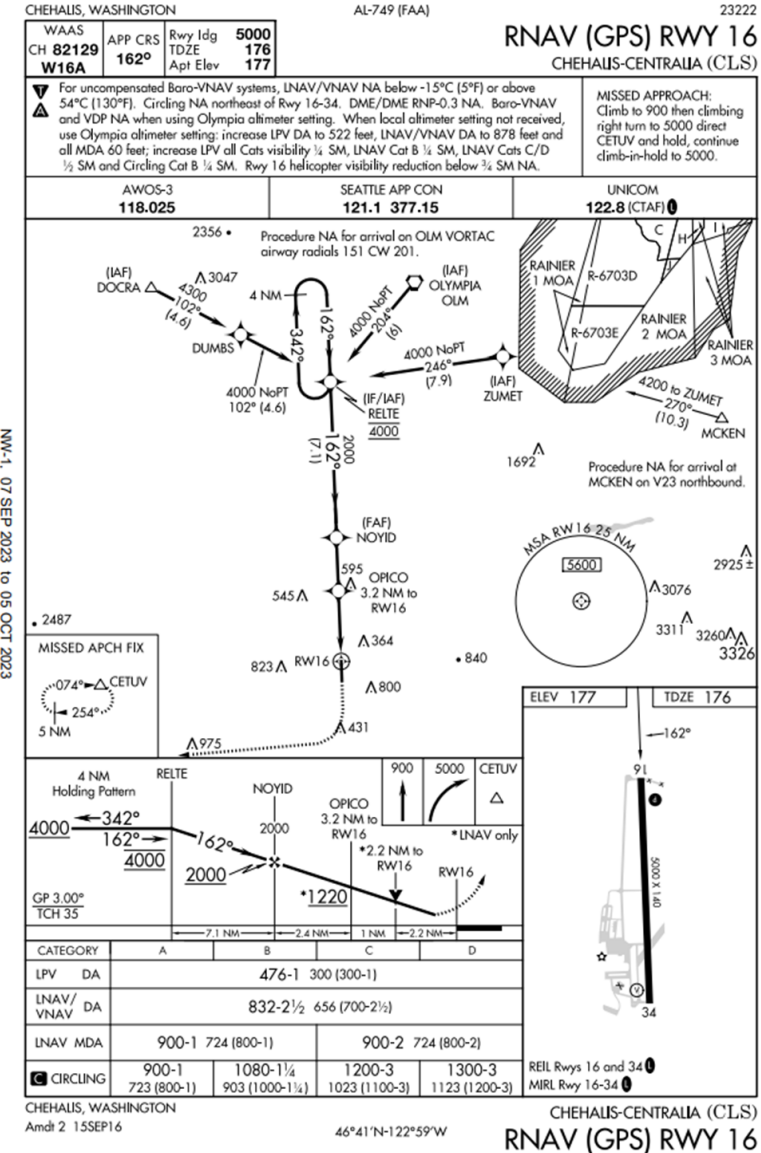
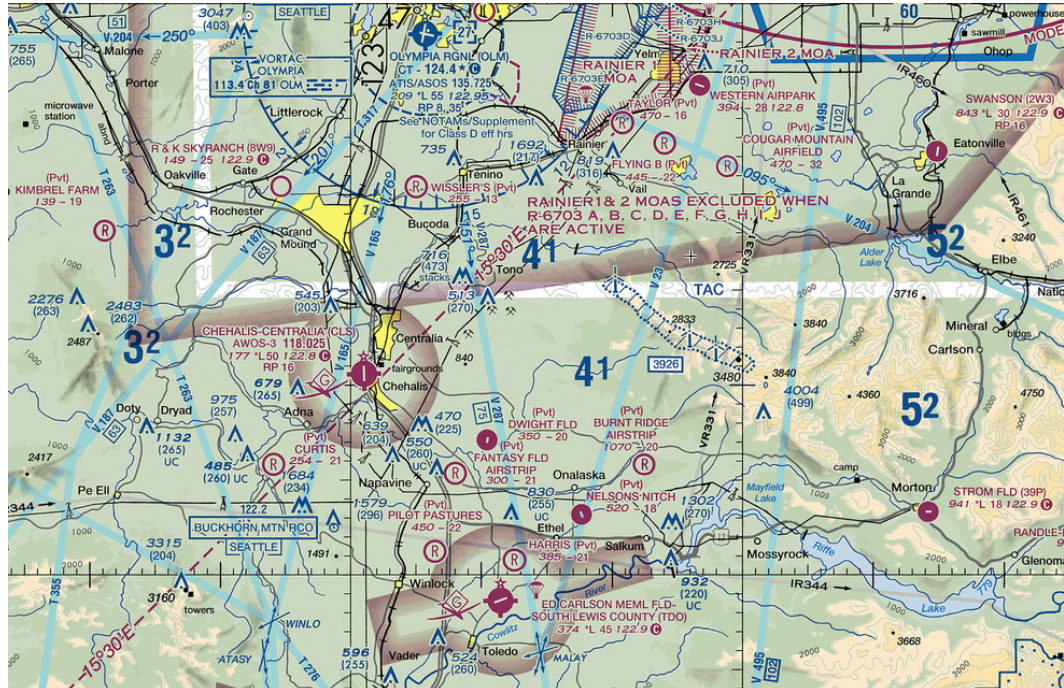
Example Aircraft

	A-I Cessna 182*
	A-II Cessna 208*
	B-I Cessna 340*
	B-II King Air*
	B-II Cessna Citation CJ3
	C-II Bombardier Challenger 600
	C-III Gulfstream V
	D-III Gulfstream G650

*Intended for aircraft weighing 12,500lbs or less

Approaches

■ RNAV (GPS) RWY 16



Airside Existing Conditions

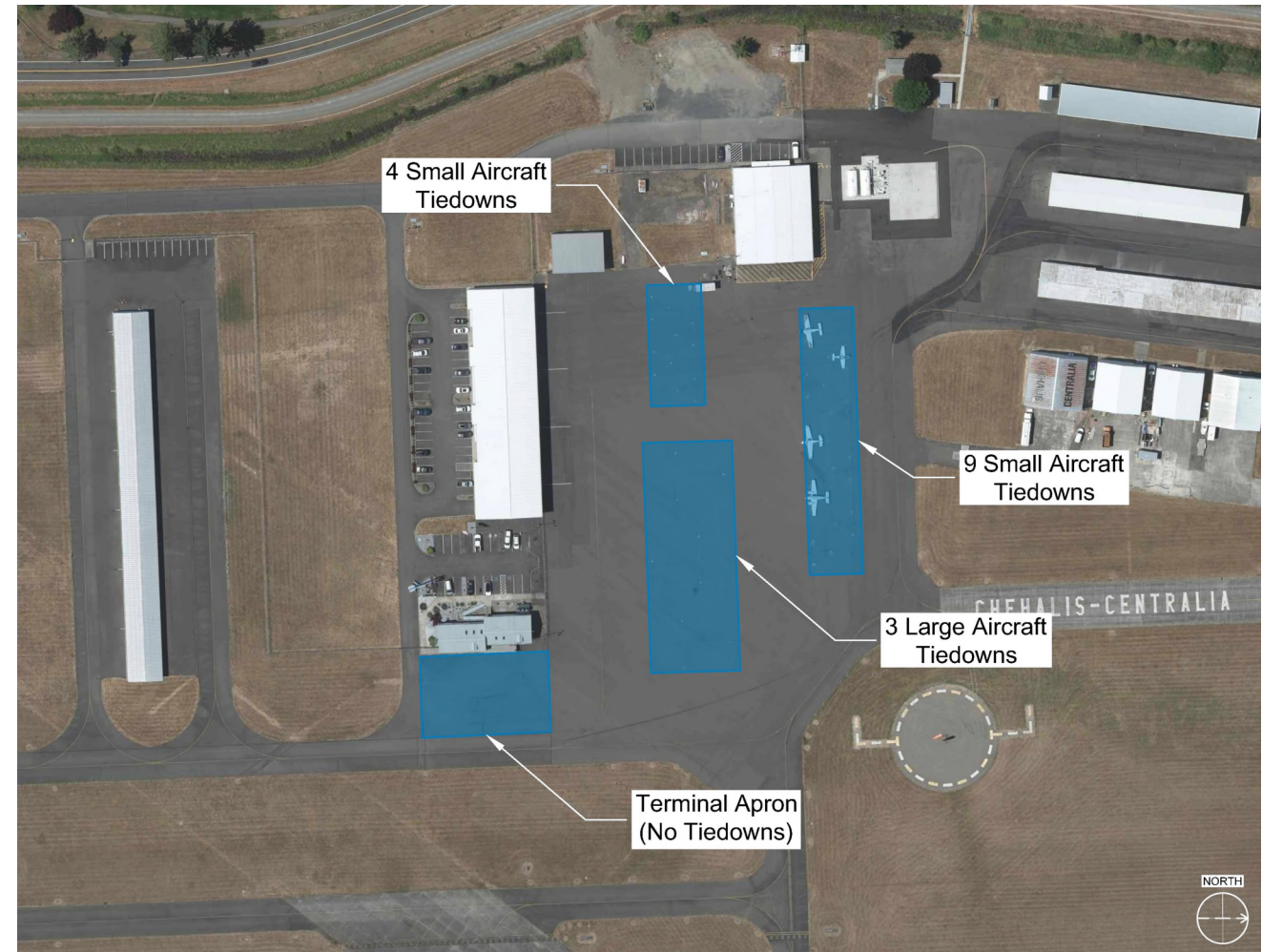
▪ Navigational Aids



- Legend:**
- 1. Beacon
 - 2. AWOS
 - 3. Windcone
 - 4. PAPI
 - 5. Segmented Circle & Windcone
 - 6. VASI
 - 7. Compass Rose
 - 8. Windcone

Airside Existing Conditions

■ Aircraft Parking



Airside Existing Conditions

Buildings

- A – 10 unit T-Hangar
- B – 4 unit – Box Row Hangar
- C – Terminal/FBO
- D – Fire Fighting storage building
- E – Aircraft Maintenance Hangar
- F – 5 unit Open T Hangar
- G – 7 unit T-Hangar
- H – 8 unit T-Hangar
- I – 8 unit T-Hangar
- J – 8 unit Open T-Hangar
- K – Box Hangar
- L – Box hangar
- M – Box Hangar
- N – Box Hangar
- O – Box Hangar
- P – 2 unit Box Hangar
- Q – Box Hangar
- R – Box Hangar
- S – Airport Maintenance Building



Landside Existing Conditions

- **Landside Airport Businesses**
 - Central Aircraft Repair
 - Airport Owned FBO – (Fuel, Hangars)
- **Airport Viewing Area**
- **Trails**
- **Twin City Town Center**



Landside Existing Conditions

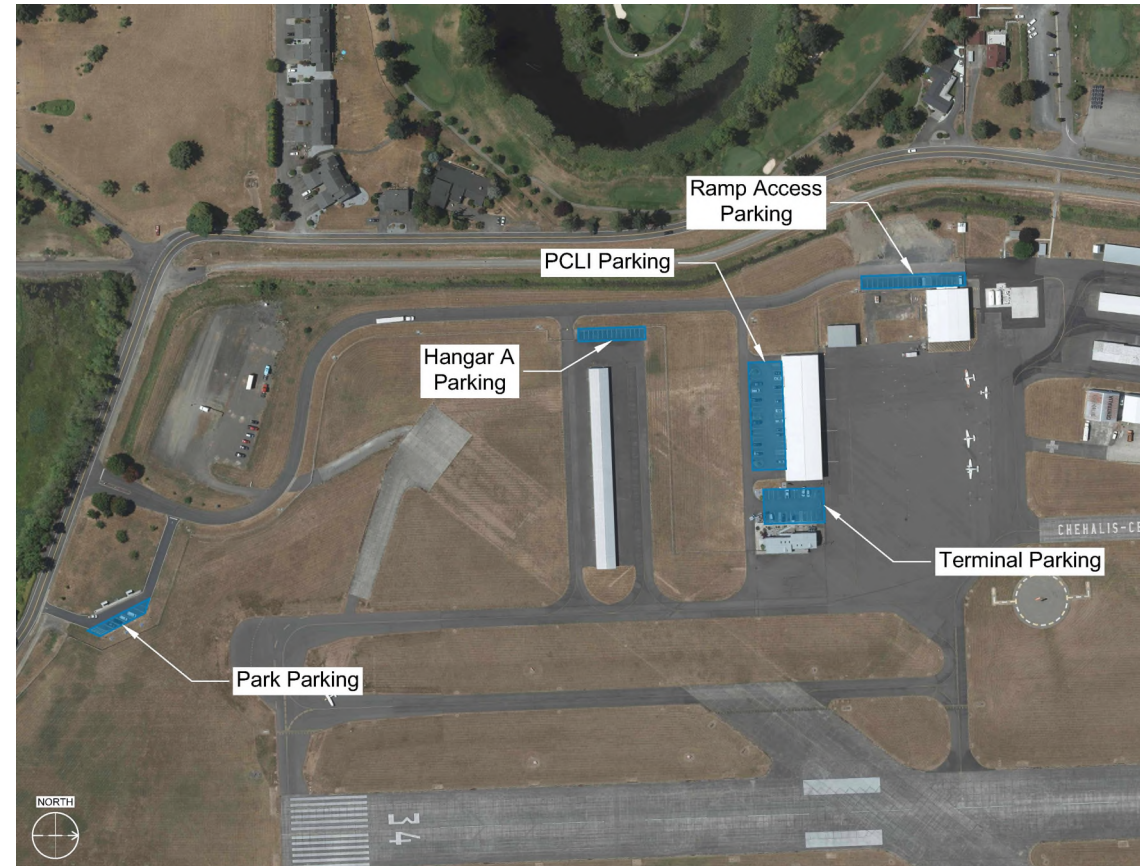


- **Twin City Town Center**

Businesses		
Applebee's Grill + Bar	Interstate Honda of Chehalis	Smoke Depot
Armed Forces Career Center	Jiffy Lube	Sonic Drive-In
Big 5 Sporting Goods	KB Nails	Starbucks
Burger King	Kobo Teriyaki	Subway
Chevron	Little Caesars	Taco Del Mar
Desert Sun Tanning Salon	Mattress Firm	The Home Depot
Dollar Tree	Maurices	T-Mobile
Dutch Bros Coffee	McDonald's	Town Center Dental
Edward Jones	Michaels	Town Center Liquor & Wine
Gamestop	Miracle-Ear	Uscellular
Glint Car Wash	O'Reilly Auto Parts	Verizon
GNC	Petsense by Tractor Supply	Walgreens
Grocery Outlet	Sally Beauty	Walmart
Happy Kids Dentistry and Orthodontics	Security State Bank	Wendy's
Harbor Freight Tools	Sherwin-Williams Paint Store	WSECU

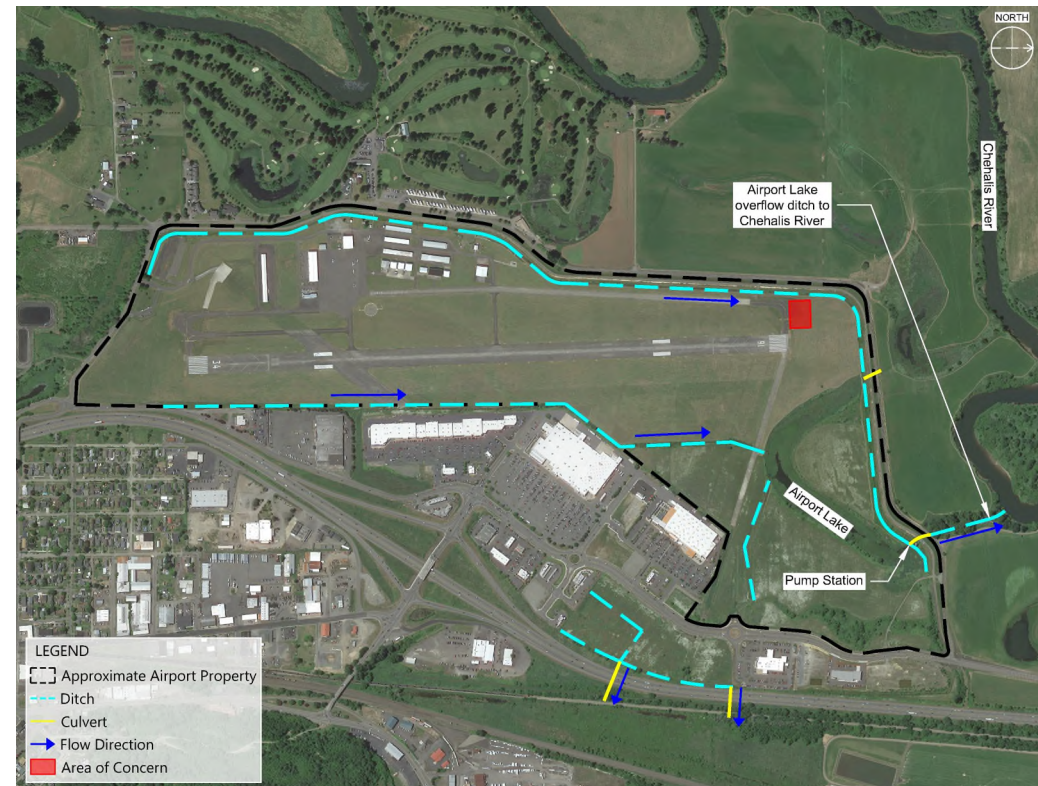
Landside Existing Conditions

- **Landside Parking Spaces**
 - 20 parking spots near the Terminal Building
 - Business and Hangars have private parking available



Environmental Existing Conditions

- **Environmental Critical Area**
 - The entire CLS property is within and nearly level with the 100-year floodplain of the Chehalis River
 - Airport is protected by a levee



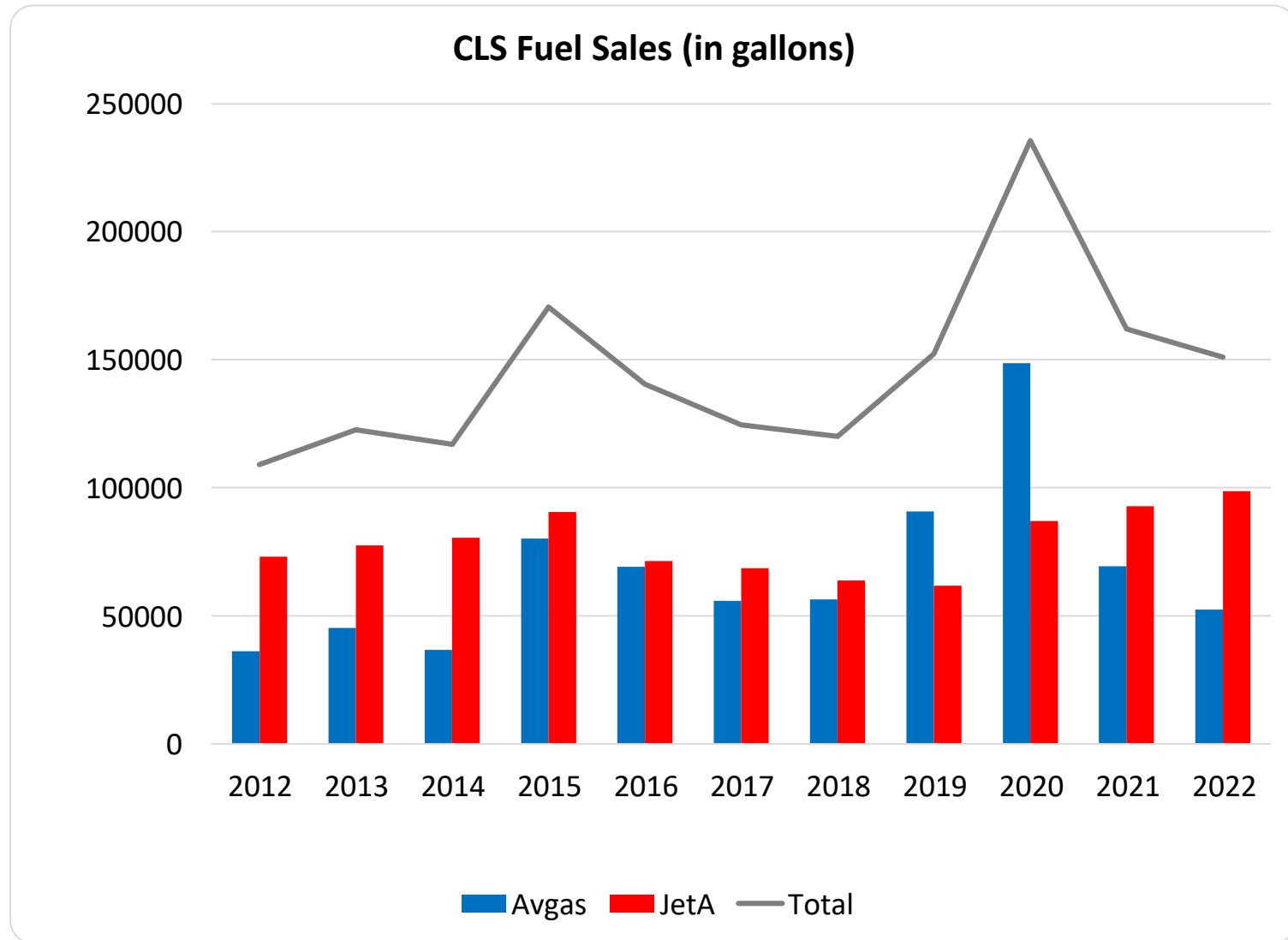
5010 Airport Master Record Data



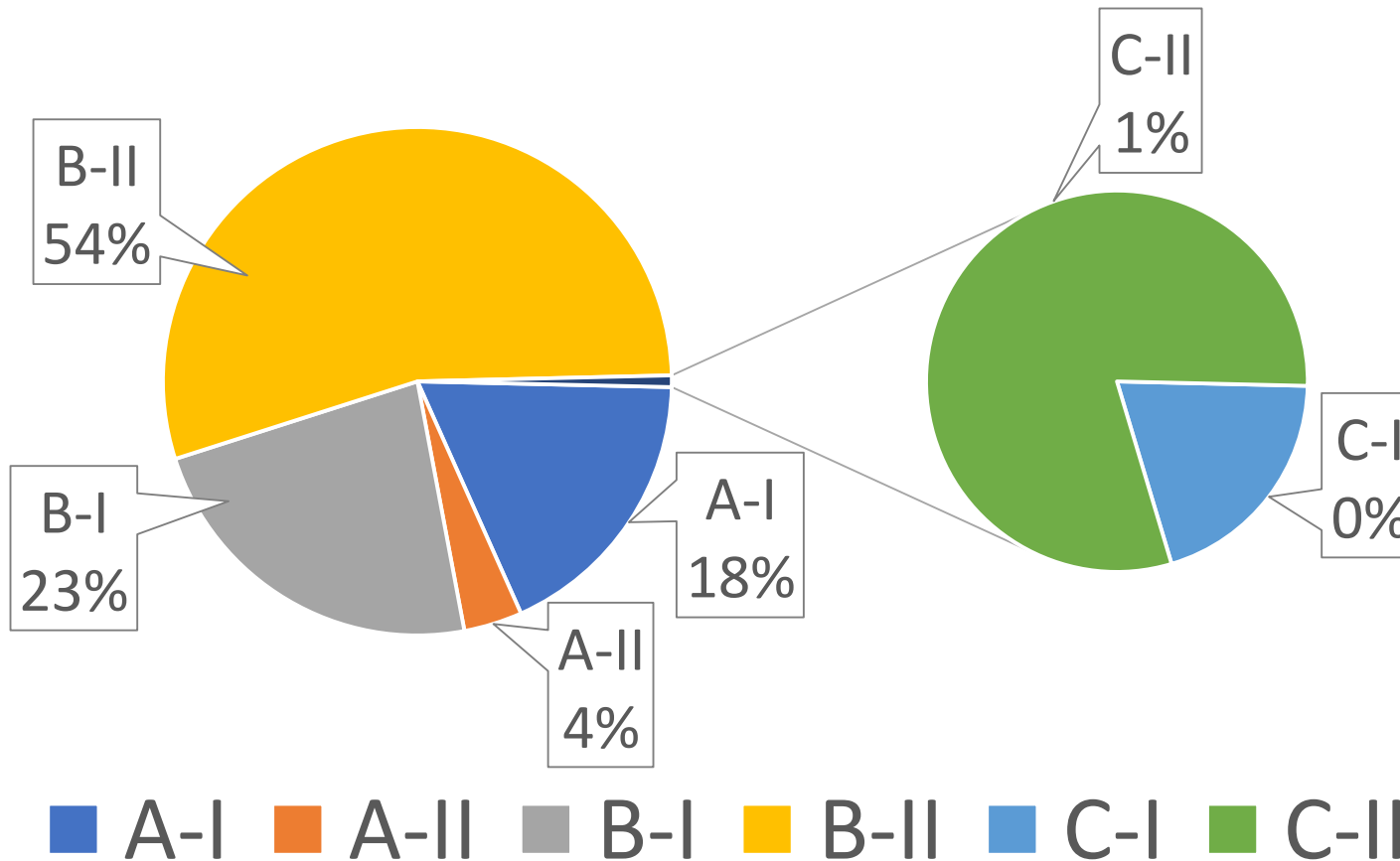
Based Aircraft	Chehalis-Centralia Airport (CLS)	Ed Carlson Memorial Field - South Lewis County Airport (KTDO)	Olympia Regional Airport (OLM)	Southwest Washington Regional Airport (KLS)
Location		14 nm SE	18 nm N	34 nm S
Single Engine	49	38	96	51
Multi Engine	3	0	8	6
Jet	4	0	3	1
Helicopter	0	2	18	1
Total	56	40	127	59
Annual Operations				
Air Taxi	4,500	0	940	1,675
GA Local	23,000	3,100	33,272	19,700
GA Itinerant	20,000	5,000	27,884	18,800
Military	210	200	1,098	685
Total	47,710	8,300	63,194	40,860
<i>5010 year</i>	<i>2020</i>	<i>2020</i>	<i>2019</i>	<i>2020</i>



Fuel Sales History



**Activity by Airport Reference Code (ARC) for
Instrument Flight Rules (IFR) Operations
FY 2022**



Example Aircraft

	A-I Cessna 182*
	A-II Cessna 208*
	B-I Cessna 340*
	B-II King Air*
	B-II Cessna Citation CJ3
	C-II Bombardier Challenger 600

Survey Results

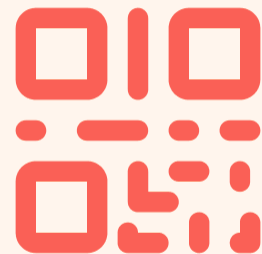
- Need for Additional Hangars
- Navigation Aids (Lighting)
- Improved Instrument Approaches
- Pavement Condition and Strength



Airport SWOT Analysis

- Strengths
- Weaknesses
- Opportunities
- Threats

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What are the airport's strengths?

ⓘ Start presenting to display the poll results on this slide.

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What are the airport's weaknesses?

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What are the airport's opportunities?

ⓘ Start presenting to display the poll results on this slide.

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What are the threats to the airport?

ⓘ Start presenting to display the poll results on this slide.

Discussion

- How can we utilize our strengths to build a stronger airport that meets future aviation demand?
- How can we improve our weaknesses?
- In what ways can we take advantage of the opportunities?
- How can we prevent threats or turn them into opportunities?



Emerging Aviation



Around the world, commercial air travel accounts for over [2 percent](#) of energy-related CO₂ emissions, according to the International Energy Agency.

Emerging Aviation

Hydrogen



Credit: ZeroAvia

Electric



Credit: Eviation

Vertiports



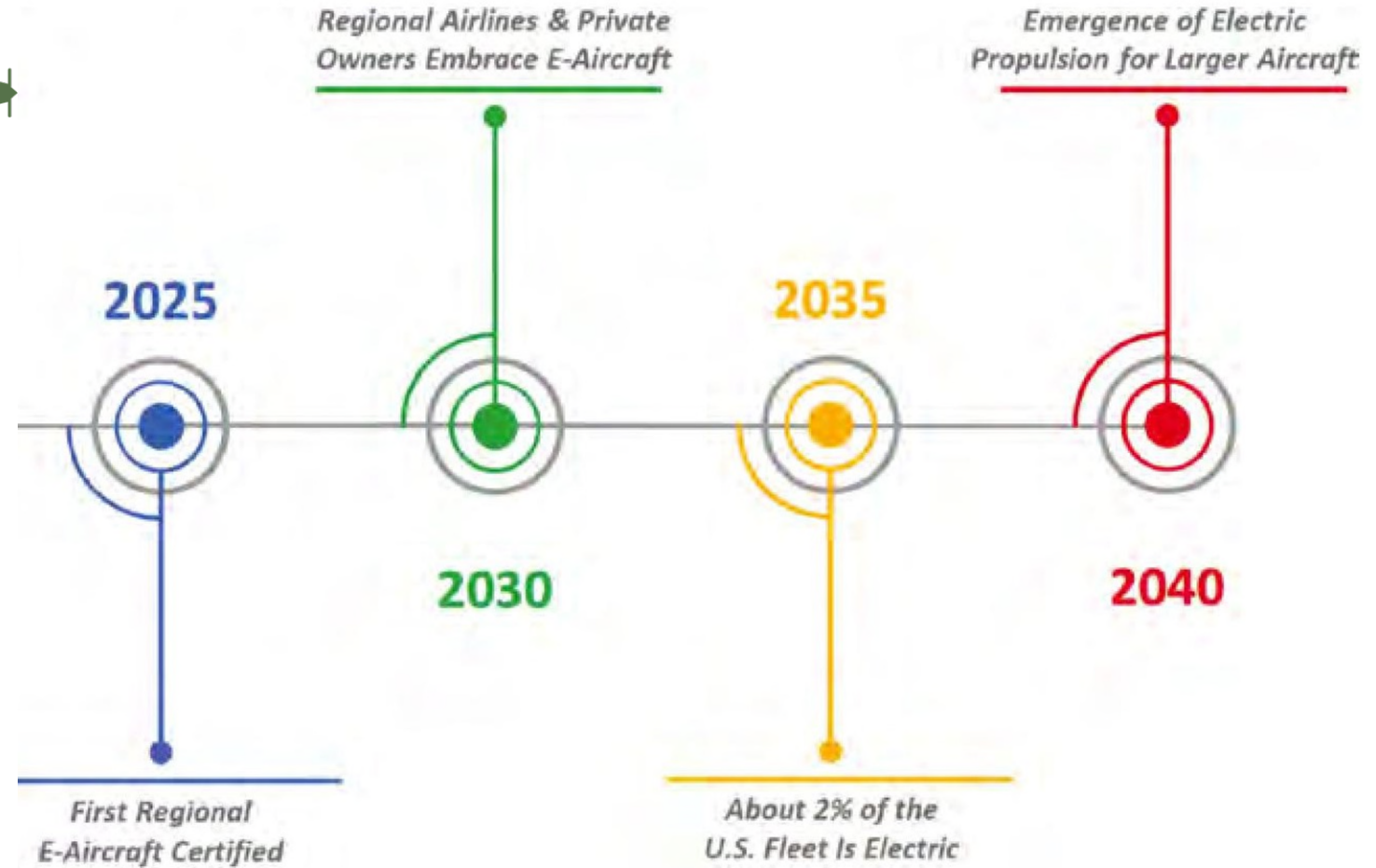
Credit: VIE

eVTOL



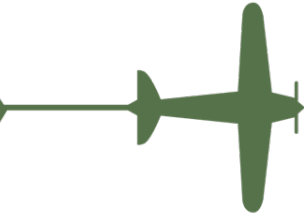
Credit: Joby Aviation

Emerging Aviation - Electric



Source: ACRP Research Report 236: *Preparing Your Airport for Electric Aircraft and Hydrogen Technologies*

Emerging
Aviation
- eVTOL



Credit: UPS



Credit: VIE

Emerging Aviation - SAF



Created from:

- Waste oils
- Plant and algae material
- Animal fats

- FAA approval for up to 50% SAF blend with Jet-A

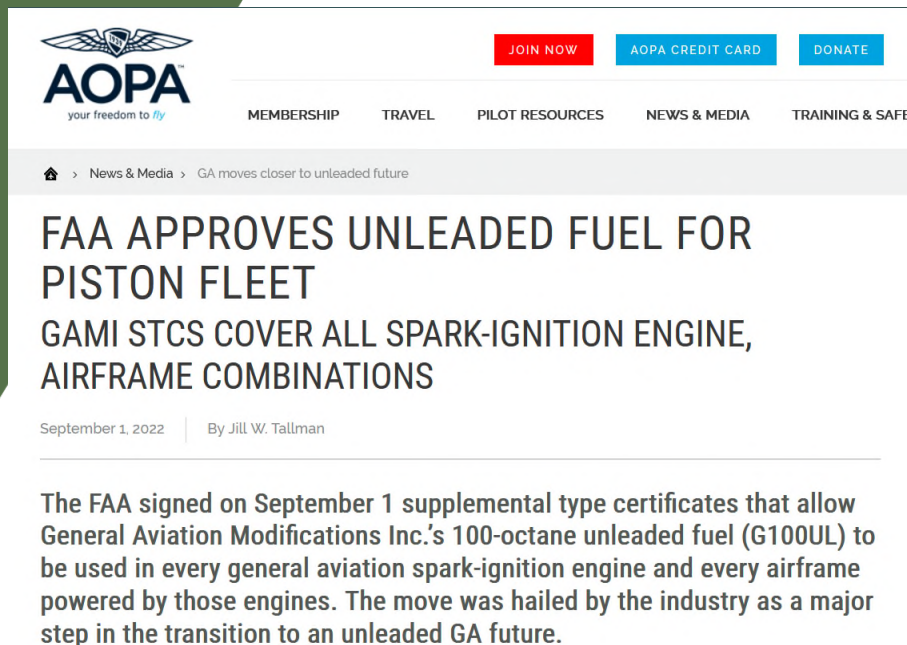
- SAF is proven, drop-in technology



Emerging Aviation - Unleaded Fuel



- EAGLE (Eliminate Aviation Gasoline Lead Emissions) – initiative of aviation organizations with goal to meet objective by 2030
- FAA has approved replacement for 100LL subject to:
 - Regulatory requirements
 - Production and distribution
- Alternative is coming, but roll out will be slow



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Home > News & Media > GA moves closer to unleaded future

FAA APPROVES UNLEADED FUEL FOR PISTON FLEET

GAMI STCS COVER ALL SPARK-IGNITION ENGINE, AIRFRAME COMBINATIONS

September 1, 2022 | By Jill W. Tallman

The FAA signed on September 1 supplemental type certificates that allow General Aviation Modifications Inc.'s 100-octane unleaded fuel (G100UL) to be used in every general aviation spark-ignition engine and every airframe powered by those engines. The move was hailed by the industry as a major step in the transition to an unleaded GA future.

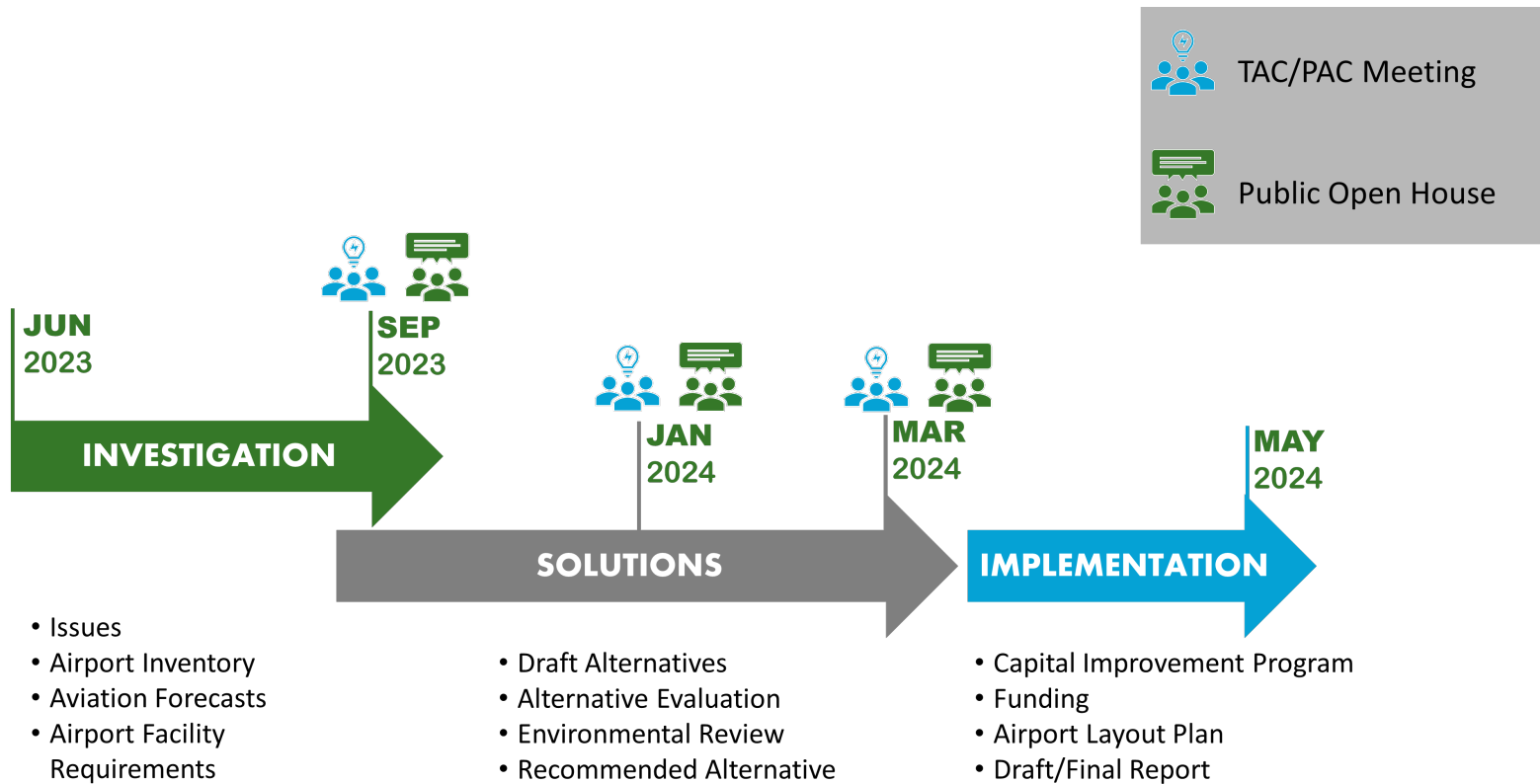
Emerging
Aviation
- Hydrogen



Credit: Airbus



Next Steps



THANK YOU!

Any Comments or Questions?

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