

Airplane Fuel Storage Facility

Community Information Meeting

Saturday, January 29, 2022



Austin-Bergstrom
International Airport



Agenda

- Introduction & Meeting Purpose
- Airport Modernization & Improvements
- Fuel Facility Operations Video
- New Fuel Storage Facility
 - Design & Location Overview
 - Operations Overview
 - Safety & Security Features
 - Site Selection & Alternative Sites
 - Previously Conducted Environmental Assessment
 - Environmental Studies: Air & Water Quality
 - Next Steps
- Q&A Session



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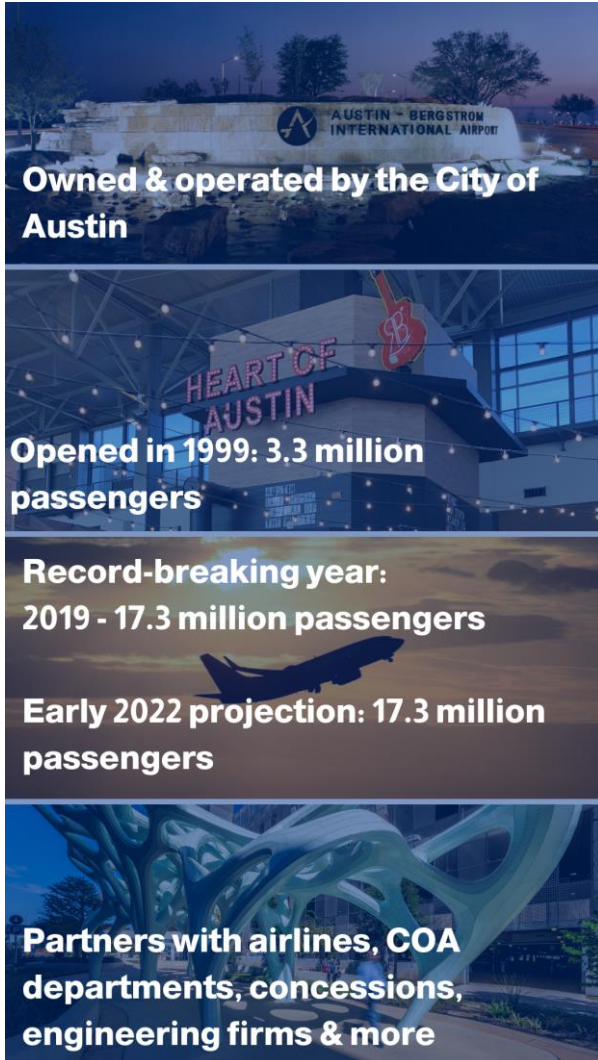


Lyn Estabrook
Airport Planning & Development
Division Manager
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Molly Waller
Principal Planner & CEO
Centurion Planning & Design

Introduction & Meeting Purpose



Why we are here today

- To communicate with airport-adjacent community members about the new Jet-A fuel storage facility
- To respond to community questions and concerns about the project
- To make sure information is available to our airport-adjacent communities in English and Spanish

IFC Resolution No 20211209-061

- The City Manager is directed to conduct community information meetings for residents adjacent to AUS. The community meetings will provide information regarding:
 1. **The site selection process for the new Jet-A fuel storage facility;**
 2. **Alternative sites for the new fuel storage facility;**
 3. **Previously conducted environmental assessments required by the FAA; and**
 4. **Environmental studies related to air and water quality impacts of the new fuel storage facility location beyond the phase of construction.**
- The community information meetings will also provide a sufficient and accessible public comment setting in multiple languages to ensure impacted residents are included. Notification of the community information meetings will be conducted in a manner which is easily accessible to residents adjacent to AUS, including but not limited to, door-to-door notification, mailers, and printed, radio, and social media.
- The City Manager is directed to provide a Council briefing regarding the recommended site for the Jet-A fuel storage facility, including information related to the governmental compliance process and environmental impact review process for the project, and to report on the comparison of any measured air pollutants of AUS fuel storage facility with the previous years' measurement, and communicate any potential effects of specific changes to air quality based on the new Jet-A fuel storage facility. A memo will be provided to Council no later than March 9, 2022.

AUS Modernization & Improvements

- The 2040 Master Plan outlines the airport's modernization & improvement projects over the next 20 years
 - Approved by Austin City Council & The Federal Aviation Administration
- **61 total Master Plan projects, including:**
 - New front terminal building
 - New midfield concourse for more airline gates
 - Runway & airfield improvements
 - New fuel facility on the west side of the west runway



AUS Modernization & Improvements

- AUS supports business & residential growth in Austin, Central Texas, and beyond
- AUS is working hard to meet the immediate needs of more flights & anticipated increased air service in the future
- AUS COVID-19 recovery has happened faster than originally predicted
 - Early projections for this year show a return to pre-pandemic passenger volumes
- **Why does AUS need a new fuel storage facility?**
 - To keep up with daily take-offs and landings at AUS
 - AUS has an average of 2 - 3 days worth of fuel; Industry average is 5 – 7 days
 - On busy travel days, AUS's current fuel storage facility has critically low fuel levels
 - This spring, AUS is welcoming new airlines, new nonstop destinations, and more flights
 - A new fuel storage facility is needed to support a projected 30 million annual passengers by 2040

New Fuel Storage Facility

- Owned & operated by AUS airlines
- On AUS property – inside the airport's fence-line
- Daily vehicle volumes on US 183: 44,950*
 - Negligible impact on traffic
Daily fuel truck volumes are estimated to be:
 - **Phase 1:** Approximately 60 trucks per day
 - **Phase 2:** Approximately 80 – 100 trucks per day

Distances measured from furthest edge of tanks to closest edge of structure, not the property line

**South of Ben White, North of Montopolis, latest available TxDOT data from 2019*

Phase 1

2 tanks

Properties within 500 feet of the site center were mailed a site plan notification

48 ft. tall, 80 ft. wide

Construction anticipated to start spring 2022

Completion within 2 years

Approximate distance from nearest business & home:

Tank 1: 622 ft. & 743 ft.
Tank 2: 522 ft. & 640 ft.

Phase 2

2 tanks

Long-term plans
Estimated 15 – 20 years

New site plan permit required
Same notification process will be used

Demolition of original facility for *hydrant fueling* operations

Approximate distance from nearest business & home:

Tank 3: 446 ft. & 558 ft.
Tank 4: 390 ft. & 488 ft.



Barbara Jordan Terminal



New Jet Fuel Storage
Facility Site

US 183

New Fuel Storage Facility

Safety & Security Features

Fire Prevention & Response

Fuel storage tanks are bonded to ensure static electricity doesn't spark a fire

Tanks are equipped with state-of-the-art foam fire suppression systems

Tanks are temperature controlled and designed to deflect heat

Lightning protection systems

All airports are required by the FAA to suspend operations including fueling, when lightning is within 5 miles

The tanks have lightning rods that channel and collect energy, grounds it and distributes it safely away from the facility

Spill & Leak Prevention

A corrosion detection system warns operators long before a leak could occur

High & low fuel level sensors warn operators of potential fuel level issues

An auto shut-off valve is activated if the tanks reach too high of a fuel level

The fuel storage facility is built on top of concrete

A lined tank containment structure provides extra protection in the unlikely event of a spill or leak

Annual inspections verify the tanks are structurally secure and that safety valves and sensors are working properly

For added security, access into the facility is controlled, staffed, and monitored 24/7 by Menzies

Permitting & Inspection Agencies

Local, state, and federal – Before construction & throughout operations

City of Austin, Development Services Department

- Approval is required for site plan & permits for fire suppression, drainage, electric, mechanical, wastewater & more

City of Austin, Department of Aviation

- Conducts safety and environmental inspections annually
- Quarterly reviews of airlines' inspections

City of Austin Watershed Department

- Site inspections every other year – spills, leaks, potential issues, spill response, waste logs, waste is disposed of properly

Austin Fire Department

- Conducts safety inspections every three months; Approves Hazardous Materials Storage permit

State of Texas – Texas Commission on Environmental Quality (TCEQ), Texas Department of Transportation (TxDOT)

- Approval is required for stormwater permits for construction and operation, underground piping permit, Air Permit by Rule, and right-of-way access permit for US 183 entrance

Federal Aviation Administration

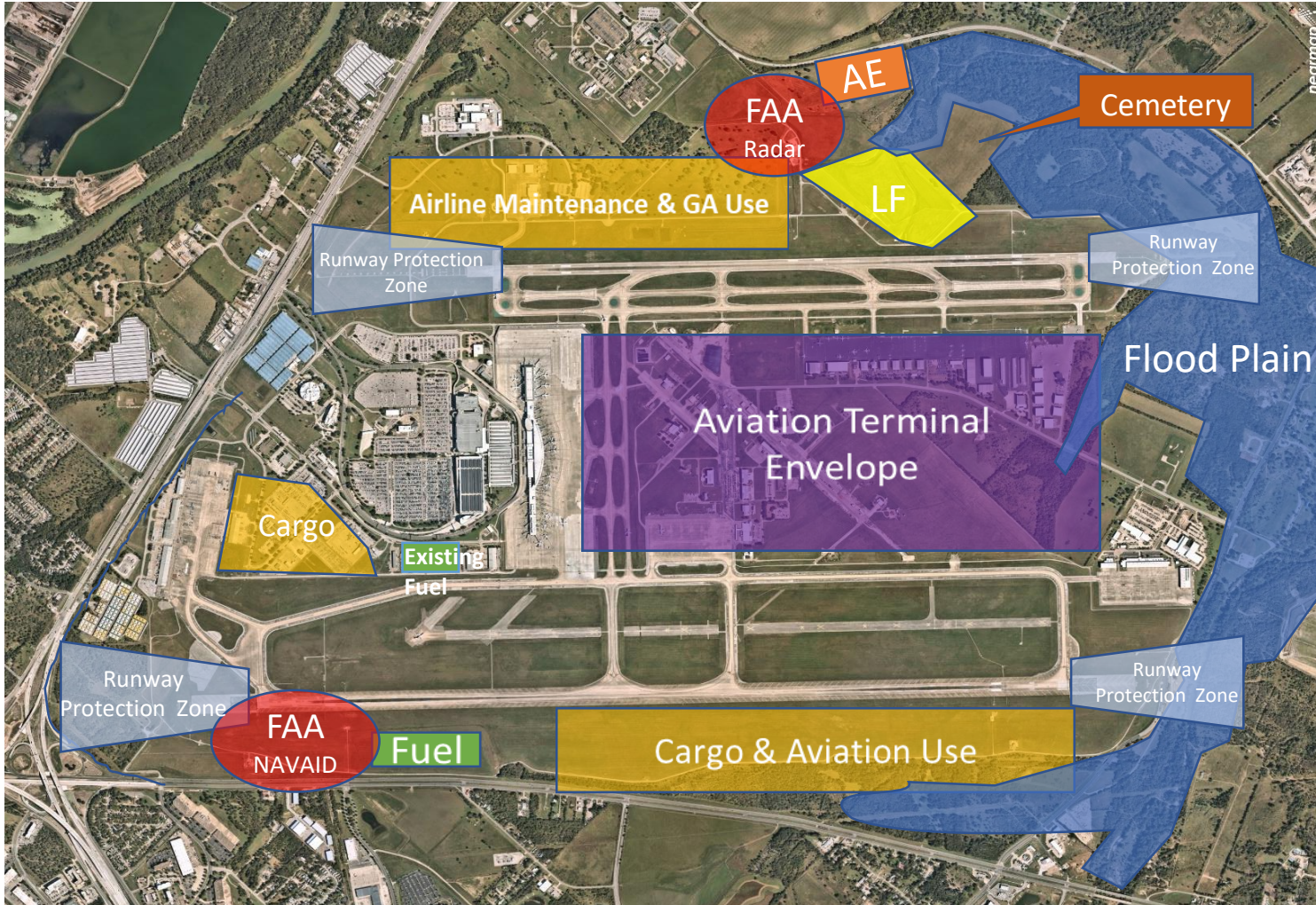
- Approval is required for the Environmental Assessment; Construction Safety Phasing plan



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 4. Environmental studies related to air and water quality impacts of the new fuel storage facility location beyond the phase of construction.

Airport Uses & Site Selection



- The fuel storage facility site was selected because:
 - Complies with the City of Austin Land Development Code (LDC)
 - It does not conflict with future airport improvements and development and their buffer zones
 - New midfield concourses
 - Realigned and improved taxiways
 - An eventual third runway
 - General aviation
 - Cargo operations
 - Military facilities

New Fuel Storage Facility

Site Selection Process

- The fuel storage facility site was selected because:
 - It complies with the City of Austin Land Development Code (LDC)
 - LDC guides all development in Austin & preserves land use compatibility
 - It does not conflict with future airport improvements and development and their buffer zones
 - New midfield concourses
 - Realigned and improved taxiways
 - An eventual third runway
 - General aviation
 - Cargo operations
 - Military facilities
 - Until the midfield concourse opens, it allows the two fuel storage facilities to connect underground to maximize fuel capacity and keeps airplane refueling truck operations at the existing site

New Fuel Storage Facility

Alternative Sites

- Alternative sites were evaluated by a third-party engineering firm, which considered:
 - Does this site impact **environmentally sensitive** areas?
 - *Flood plain; archeological sites; Onion Creek*
 - Is this site **already dedicated** to another project or **already in use**?
 - Third runway; new gates; midfield concourses; airfield infrastructure; general aviation
 - Does this site meet FAA design criteria standards?
 - Is this site compatible with the City of Austin Land Development Code?
 - Can we connect this site to the existing facility?
 - Will this site work with future hydrant fueling plans?
 - Are there impacts to drainage operations?
 - How would this site impact overall fuel operations?

New Fuel Storage Facility

Alternative Sites

- **Expand existing fuel storage facility**
 - This site will become a taxiway for a third runway
 - Incompatible with hydrant fueling
- **Southern sites – West of Emma Browning Ave.**
 - These sites will become long-term parallel concourses
 - No airport service road connectivity
 - Certain sites already in use by general aviation
 - Certain sites too close to Onion Creek & 100-year floodplain



New Fuel Storage Facility

Alternative Sites – Findings of third-party engineering firm

- **Northeast site – In between Golf Course Rd & E. Perimeter Rd**
 - Located in aircraft maintenance expansion area
 - No airport service road connectivity
- **East sites – West of FM 973, east of E. Perimeter Rd.**
 - No airport service road connectivity
 - Are located within FAA navigation radar zone
 - Require crossing Onion Creek or are in close proximity to the 100-year floodplain
 - Would require relocation of a drainage channel
 - Require demolition of buildings currently in-use
 - Are too close to a landfill and cemetery
 - Already selected for new Austin Energy substation

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Previous Environmental Assessment

What is NEPA?

- National Environmental Policy Act of 1969 (NEPA) requires federal agencies to assess the environmental effects of their proposed actions before making decisions
- President's Council on Environmental Quality (CEQ) oversees federal agency implementation of NEPA
- Federal agencies are charged with the development of policies and procedures for implementation of NEPA requirements

Previous Environmental Assessment

Federal Aviation Administration (FAA) Implementation of NEPA

- FAA requires NEPA analysis for projects receiving grant funding or requiring a change to the airport layout plan (ALP)
- 3 levels of analysis – categorical exclusion, environmental assessment, environmental impact statement
- 21 environmental categories require an evaluation and possible consultation or coordination with state and federal agencies
- Levels and types of analysis are dependent on impact thresholds as established within FAA Order 1050.1 and 5050.4

Environmental Impacts from Proposed Action

- 21 resource categories evaluated, thresholds of significance are outlined within FAA Orders 1050.1 and 5050.4.
- Temporary construction-related impacts – noise, air quality, water quality
 - These impacts will be minimized by implementing construction Best Management Practices.
- Social impacts resulting from modifying the Highway 183/Metropolis Drive interchange
 - Planned improvements include the addition of a 4th signal at the intersection and acceleration and deceleration lanes.
- Solid and hazardous material impacts resulting from construction and the introduction of hazardous materials to the project site.
 - These impacts will be minimized using best management practices and industry-standard construction methods and materials.
- Resources in the project area that were avoided include
 - Wetlands
 - Biological resources
 - 100-year floodplain

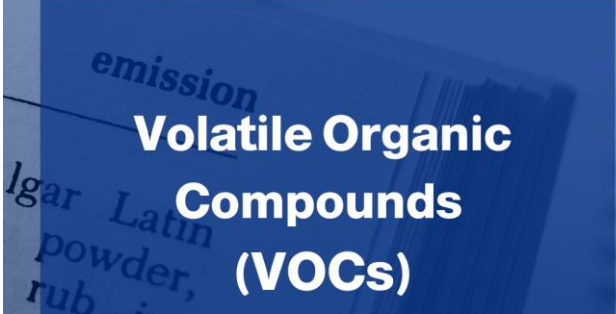
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Environmental Studies

Air Quality

- The new facility's TCEQ air permit allows it to emit up to **25 tons of VOC** emissions each year
 - Existing facility emits approximately **4.3 tons** of VOCs
 - Includes **1.9 tons** of Jet-A VOCs from airplane refueling operations
 - Phase 1 is estimated to emit approximately **3.6 tons** of VOCs
 - Does not include airplane refueling operations
- Fuel vapor levels are low because tanks and fuel are not hot
- Emissions from the tanks and fuel delivery process become diluted past approximately 200 feet



Volatile Organic Compounds (VOCs)

- Emissions from liquids & fuel, including Jet-A
- Created from a variety of chemicals
- Put into the air by vapors
- 100 plus degrees must be sustained to create Jet-A fuel vapors



Environmental Studies

Water Quality

- **EPA Spill Prevention Control and Countermeasures (SPCC), Plan and Facility Response Plan**
 - The design engineer will prepare these before the facility is operational
 - Plans must meet federal standards
 - These plans are audited by AUS and can be audited by the federal government
- **State of Texas, TCEQ**
 - Reviews and approves stormwater permits for construction and operation
- **City of Austin Watershed Department Inspections**
 - Inspects for leaks, spills, any potential issues, spill response and ensures waste is disposed of properly
- **City of Austin Department of Aviation Annual Inspection**
 - Safety
 - Security
 - Environmental

New Fuel Storage Facility

Next Steps

Based on feedback from the community, AUS will:

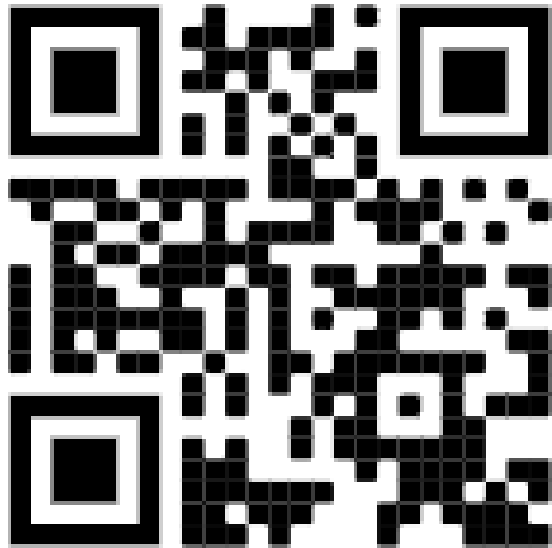
- Require the airlines to implement methods to monitor emissions from the tanks
- Validate air quality data by an independent air quality expert
- Hire an independent water quality expert to review annual water quality reports
- Continue to conduct annual safety, security & environmental inspections



New Fuel Storage Facility

Next Steps

AUS will provide facility construction updates to community members through the airport's monthly "Stay in Tune" e-newsletter



- Scan the QR code to sign up for the airport's newsletter
- View project updates at SpeakUpAustin.Org/AUSFuel

New Fuel Storage Facility

Next Steps

AUS is working with the airlines to redesign the US 183 facing portion of the fuel storage facility

- A new decorative security fence along the project line
- Enhanced landscaping & hardscaping



New Fuel Storage Facility

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Resources

- **For project information & all meeting materials:**
 - SpeakUpAustin.org/AUSFuel
- **To learn more about upcoming AUS improvement projects:**
 - AustinTexas.gov/AEDP
- **To learn more about AUS Environmental Affairs:**
 - AustinTexas.gov/Department/Environmental-Responsibility

Thank you!

Community Information
Meeting for the AUS
Fuel Storage Facility Project

January 29, 2022

