



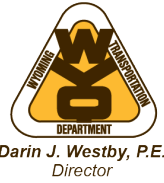
Mark Gordon
Governor

WYOMING *Aeronautics Commission*

DEPARTMENT OF TRANSPORTATION

5300 Bishop Boulevard
Cheyenne, Wyoming 82009-3340

Bruce McCormack, Chairman
(307) 777-4015



Darin J. Westby, P.E.
Director

MEETING MINUTES

I. CALL TO ORDER

A meeting of the Wyoming Department of Transportation (WYDOT) Aeronautics Commission was held on Friday, September 29, 2023, at the Best Western Tower West Lodge, in Gillette. Chairman Bruce McCormack presided, calling the meeting to order at 9:00 a.m.

II. PLEDGE OF ALLEGIANCE

Chairman McCormack led the attendees in the Pledge of Allegiance.

III. ROLL CALL

The following commission members were present, constituting a quorum.

Bruce McCormack, Chairman, District 4

Steve Maier, Commissioner, District 5

Jerry Blann, Vice Chairman, District 2

Sigsbee Duck, Commissioner, District At-large

Dean McClain, Commissioner, District 1

Randy Harrop, Commissioner, District At-large

Bill DeVore, Commissioner, District 3

Darin Westby, WYDOT Director, Ex-Officio

The following WYDOT staff and guests were present and participated in the business meeting.

Brian Olsen, Aeronautics Administrator

Sheri Taylor, Unmanned Aircraft Systems (UAS) Manager

Mariah Johnson, Air Service Development Manager

Mike Kahler, Senior Assistant Attorney General

Phillip Hearn, Engineering & Construction Manager

MacKenzie Sewell, Assistant Attorney General

A.J. Schutzman, Planning & Programming Manager

Kimberly Chapman, Commission Secretary

Caitlin Casner assisted with virtual meeting management.

IV. AGENDA ADJUSTMENTS

There were no adjustments to the agenda.

V. UPDATES/DISCUSSIONS

A. CHAIRMAN'S UPDATE

Chairman McCormack presented a brief Chairman's Update.

Chairman McCormack thanked the Wyoming Airports Coalition, the city of Gillette, and all of the vendors for a great conference.

Chairman McCormack commended the coalition and WYDOT for each group's efforts to represent aviation interests to the legislature and elected officials. He offered the commission's assistance in communicating with legislators and advocating for airports.

VI. AMERICAN CONCRETE PAVING ASSOCIATION (ACPA)

Angela Folkestad and Sarah Dalton, Professional Engineers with the Colorado-Wyoming Chapter of the ACPA, presented an introduction to concrete paving to the commission. The ACPA is the trade association representing the interests of those involved with the design, construction, and preservation of concrete pavements.

Ms. Folkestad began by reviewing the differences between concrete and asphalt. Concrete carries load in the pavement structure, while asphalt relies on the strength of the base materials and subgrade. Concrete is a rigid pavement, whereas asphalt is flexible.

Ms. Folkestad addressed some of the common concrete myths. Depending on the scope of the project, concrete pavement projects are not necessarily more expensive or of longer duration than asphalt. She also stated the myth that existing pavement cannot be overlaid with concrete is false.

Construction projects are seeing industry-wide rising costs, and concrete paving projects are impacted as well. Overall, the inflation rate for cement, concrete, and aggregates is less volatile than other materials, so consumers and producers are seeing more modest price increases compared to asphalt.

Concrete covers 16 percent, or 9,928,714 square feet of airport surfaces in Wyoming, with most concrete surfaces on aprons or runways. While the Cheyenne runway was just finished reconstruction, the Gillette runways were constructed in the 1980s. Despite the age of Gillette's runways, both score well in the pavement condition index (PCI). PCI trends show that these runways are performing well. The average change per year was 0.5 points on the PCI scale (the national average is 1.2 points.) Ms. Folkestad stated that the PCI trends for asphalt are slightly steeper than those of concrete.

The concrete/cement industry has received notoriety for CO₂ emissions. Ms. Folkestad reported that based on the U.S. Environmental Protection Agency's carbon emissions data, the manufacture and production of cement/concrete accounts for 1.25 percent of U.S. CO₂ emissions.

The concrete industry is committed to reducing emissions, and Ms. Folkestad said the Colorado-Wyoming Chapter of the APCA will align itself with Governor Gordon's "Decarbonizing the West" initiative. Ms. Folkestad shared that while the industry is taking a number of steps to work towards carbon neutrality and greater sustainability, one of the biggest initiatives is the use of carbon capture [to avoid the release of CO₂ emissions]. Mountain Cement, in Laramie, plans to integrate carbon capture technology into their operations in the next few years.

The industry uses a number of strategies to reduce emissions and improve sustainability across the concrete value chain and during all phases of construction. Most of the focus in the pre-construction phase has concentrated on the cementitious materials—as a large producer of greenhouse emissions—

but there are other actions that can be taken in this phase. Engineers can modify the pavement design process to make improvements and find areas for potential mitigations. This includes examination of the materials and aggregates used in the mixture.

Conducting a life cycle cost analysis (LCA), which compares different options and determines which pavement design is most cost effective, is an essential component of the design phase. These analyses compare different pavement methods over equivalent time periods and factor in the initial project cost, the lifespan of the pavement, and maintenance costs. In addition to economic considerations, an LCA can anticipate emissions reductions by examining maintenance needs over the lifespan of the pavement.

Additionally, the industry has made major changes to concrete mixtures over the last decade. Performance Engineered Mixtures (PEM) utilize optimized gradations of aggregates to decrease the amount of cement needed. Supplementary cementitious materials such as fly ash or slag cement are also used in some mixtures.

Ms. Dalton shared some of the sustainability strategies that can be implemented during the construction phase. One strategy is to use locally available materials, including recycled concrete and PEMs. Mobile batch plants can be brought directly onto the site for concrete projects, which reduces hauling emissions.

Once a project is completed, Ms. Dalton shared that concrete becomes a “carbon sink.” Concrete will absorb a significant amount of CO₂ over its lifetime in a process known as carbon uptake or recarbonization. Ms. Dalton reported that the maximum amount of CO₂ that concrete can reabsorb is equal to the amount emitted during the calcination of limestone in the cement manufacturing process. It is estimated that globally concrete will reabsorb 25 percent of the CO₂ emissions released during production.

The preservation and restoration of concrete projects is a critical component of sustainability. The objective is to extend the life of the pavement as much as possible to delay reconstruction and thereby reduce emissions. The industry uses numerous techniques to maximize the lifespan of concrete pavement including panel replacement, diamond grinding, and joint resealing.

Concrete overlays can be used as a means of preservation. Ms. Dalton stated that overlay projects are resource efficient, cost effective, quick to construct, and have a long lifespan. Concrete overlays should be completed on asphalt surfaces with a low PCI (below 70).

Ms. Dalton reported that concrete pavements can improve airport safety. With its lighter color, concrete reflects more light than asphalt. When used on parking lots, concrete reduces the needed amount of commercial outdoor lighting since it has a higher light reflection value.

Ms. Dalton shared that the ACPA is hosting a Best Practices in Airfield Paving Workshop in Denver on October 24-26, 2023. A number of speakers from the Federal Aviation Administration (FAA) will speak at the workshop.

Following questions from Commissioner DeVore, Ms. Folkestad shared that as of 2019 low-alkali cement was eliminated as a standard in the ASTM C 150 for portland cement. She said it was an error that it was still included in the FAA specifications. The industry has moved away from low-alkali cement because it is a resource-intensive production process. Ms. Dalton shared that the FAA released an engineering brief back in the spring that addressed the low-alkali cement specification for all future projects.

In response to Commissioner DeVore's question about the portland cement shortage in Wyoming, Ms. Folkestad shared that cement plants in Utah were shut down in 2022 to make repairs that had been delayed by the COVID-19 pandemic. These repairs caused manufacturing delays, which were exacerbated by the shutdown of a plant in Colorado. The repairs were successful, the plants are operating efficiently, and the manufacturers are slowly making up the deficit.

Following a question from Commissioner McClain, Ms. Dalton detailed the benefits of fly ash. Fly ash, which is a byproduct of coal combustion, can replace a percentage of the portland cement in concrete. Ms. Dalton reported that fly ash improves the durability and sustainability of concrete. It also improves the finish of concrete because it reduces cracking, permeability, and bleeding.

In response to a question from Director Westby, Ms. Dalton stated that there is strong supply of fly ash in Wyoming. The closure of coal-fired power plants has not yet affected concrete manufacturers in the Rocky Mountain West. Only 30 percent of the fly ash produced has actually been used; the rest was placed in single-source landfills. Once the current supplies dwindle, manufacturers will reclaim fly ash from the landfills for concrete and other industrial uses.

VII. AIRPORT PRESENTATIONS

A. EVANSTON – UINTA COUNTY BURNS FIELD

Gary Welling, Uinta County GIS coordinator and director of IT and Planning, and Jeremy McAlister, project manager with Ardurra, updated the commission on the recent runway rehabilitation and lighting project at the Evanston-Uinta County Airport. Pavement was reconstructed and repaired, NAVAIDS were upgraded and replaced, and additional lighting was installed. Mr. Welling thanked the commission and WYDOT Aeronautics Division staff for their support.

B. RALPH WENZ FIELD - PINEDALE

Riley Wilson, Pinedale airport manager, and Carson Rowley, project manager with Ardurra, provided an update on airport projects. The airport recently completed several projects including the reconstruction of the north general aviation (GA) apron, runway rehabilitation, and expansion of the east GA apron. Currently, the airport is working to acquire new snow removal equipment and update their airport master plan. Upcoming projects include a rehabilitation of the south GA apron, rehabilitation of Taxiway A, constructing a new pilot's lounge/terminal building, and the acquisition of new mowing equipment.

C. RAWLINS MUNICIPAL AIRPORT

Megan McComas, sales and event marketing coordinator for the Carbon County Visitors' Council, and Josh Morris, project manager with Ardurra, provided an update on the runway rehabilitation project at Rawlins Municipal Airport. The pavement for Runway 4/22 was completely replaced, and new runway lights, signs, REILs, and windcones were installed. The airport completed a planning study and master plan in 2021. The airport will soon receive new mowing equipment and will soon begin construction of a new GA terminal.

D. COKEVILLE MUNICIPAL AIRPORT

Jason Thornock, chairman of the Cokeville Airport Board, updated the commission on the current status of the airport. Although once paved, the runway is now a dirt/gravel runway. According to Mr. Thornock, the runway condition is poor with rough, sharp gravel and loose material. Several pilots have sustained flat tires and other minor damage from the runway.

The runway is no longer part of the FAA's system and the town is not interested in maintaining the airport. Mr. Thornock, and other concerned citizens, are trying to save the airport. The board will be requesting \$150,000 through the WACIP to resurface the runway with a double-layer chipseal.

E. JACKSON HOLE AIRPORT

Dustin Havel, assistant airport director of operations for the Jackson Hole Airport, updated the commission on airport projects. Currently, the airport is in the process of acquiring new aircraft rescue and firefighting (ARFF) trucks in order to transition to the newly-approved, PFAS-free firefighting foam. The initial phase of construction for the expanded deicing pad is progressing well, but given the size and scope of the project it will not be complete until 2026.

The airport took over the administration of the fixed-base operator (FBO), Jackson Hole Flight Services, on May 1, 2023. The hangar project, which the commission saw during a visit earlier this month, has made significant progress. Future plans include improvements to the FBO and the construction of an aviation safety center.

F. UPTON MUNICIPAL AIRPORT

Lori Materi, airport manager; Kelley Millar, Upton town clerk and treasurer; Tim Wick, airport engineer with Morrison-Maierle; and Patrick Stetson, engineer in training with Morrison-Maierle, thanked the commission for all of their support of the Upton airport. The airport received funding in 2020 to complete an airport master plan and it is now complete. The commission commended the group for their commitment to the airport and congratulated them on completing the plan.

VIII. EXECUTIVE SESSION

There was no need for an executive session.

IX. ANNOUNCEMENTS/REMINDERS

Commission Activities

Ms. Chapman announced that the commission's next business meeting will be Tuesday, October 17th at 1:30 p.m., via videoconference.

Ms. Chapman reminded the commissioners of the last fly-in of the season, which is in Worland on September 30th.

X. ADJOURNMENT

It was moved by Commissioner Harrop to adjourn and passed unanimously. Chairman McCormack adjourned the meeting at 10:19 a.m. on September 29, 2023.