NORTHERN COLORADO
REGIONAL AIRPORT COMMISSION
4900 EARHART ROAD • LOVELAND, CO 80538

SPECIAL MEETING AGENDA
MONDAY, JUNE 16, 2025
3:00PM – 5:00PM
ALL MEMBERS OF THE PUBLIC ARE INVITED TO ATTEND THIS MEETING IN-PERSON AT:
4867 VENTURE DR, JOHNSTOWN CO 80534 – BOARD ROOM
OR OBSERVE VIRTUALLY USING THE INFORMATION BELOW:

Join Zoom meeting:
https://us06web.zoom.us/j/81745121465?pwd=5ppt3wqwwanti9jljsxjapkmwnncin.1
Meeting ID: 817 4512 1465
Passcode: 259087
Dial by your location: +1 719 359 4580 us
Find your local number: https://us06web.zoom.us/u/kcggeyweg

CALL TO ORDER

ROLL CALL

PUBLIC COMMENT *10 MINUTES*

CONSENT AGENDA

1. MAY 15, 2025, REGULAR MEETING MINUTES *PAGE 3*
2. LEASE EXTENSION REQUEST – 5299 BEECHCRAFT *PAGE 10*
3. CDOT AERONAUTICS DISCRETIONARY AVIATION GRANT RESOLUTION *PAGE 11*

APPROVAL OF CONSENT AGENDA

PULLED CONSENT AGENDA ITEMS

4. **AIRPORT DIRECTOR'S REPORT** *PAGE 22* *15 MINUTES*
   A. INFORMATIONAL ITEMS
   B. STAFF FOLLOW-UP TO COMMISSION REQUESTS FOR ADDITIONAL INFORMATION
      - RUNWAY 6/24 OVERVIEW
      - AIR TRAFFIC CONTROL TOWER OVERVIEW/UPDATE
        - TEMPORARY AIR TRAFFIC CONTROL TOWER
        - PERMANENT AIR TRAFFIC CONTROL TOWER

REGULAR AGENDA

5. QUARTERLY AIRPORT FINANCIAL UPDATE *PAGE 75* *5 MINUTES*
   INFORMATIONAL
   PRESENTER: MOLLY ELDER, DEPUTY CHIEF FINANCIAL OFFICER
6. RUNWAY 15-33 WIDENING CONSTRUCTION MANAGEMENT CONTRACT AWARD *PAGE 77* *10 MINUTES*
   ACTION
   PRESENTER: DYLAN SWANSON, OPERATIONS MANAGER

7.	CAPITAL IMPROVEMENT PLAN 2026-2030 *ACTION* *PRESENTER: JOHN KINNEY, AIRPORT DIRECTOR*	*PAGE 121*	*10 MINUTES*
8.	REVISED 2026 BUDGET RECOMMENDATION *ACTION* *PRESENTER: JOHN KINNEY, AIRPORT DIRECTOR*	*PAGE 124*	*15 MINUTES*
9.	AIRPORT SECURITY POSSIBLE EXECUTIVE SESSION PURSUANT TO C.R.S. § 24-6-402(4)(d) TO DISCUSS SPECIALIZED DETAILS OF SECURITY ARRANGEMENTS OR INVESTIGATIONS REGARDING AIRPORT ACCESS CONTROL *ACTION* *PRESENTER: JOHN KINNEY, AIRPORT DIRECTOR*	*PAGE 136*	*15 MINUTES*
10.	AIRPORT BADGING FEE UPDATE *ACTION* *PRESENTER: DYLAN SWANSON, OPERATIONS MANAGER*	*PAGE 137*	*10 MINUTES*
11.	ADDITIONAL BUSINESS FROM AIRPORT COMMISSIONERS		*5 MINUTES*

FUTURE MEETING TOPICS	
July 17 - 3:00-5:00 **Study Session Format** • CDOT Aeronautics Digital Tower Update • Sites B and C Development History and Future • Ethics Presentation by CAO • COL Auditors Findings	**AUGUST 21 - 3:00-5:00** • Air Service Development Work Study Session

MAY 15, 2025 REGULAR COMMISSION MEETING
SIGN-IN SHEET

PLEASE PRINT:

NAME	ORGANIZATION
JIM SAMPSON	SCION AVIATION
KOSTA CONSTANTINE	LOCAL PILOT
Hale Wahl	FCACC
Danny McGinn	Jetcenter
Troy Daniels	
Terry Cecil	Professional Aircraft Services
Scott Hulet	Discovery Air
James Owen	Holcim
Stefan Lunda	Holcim
Jane Peters	Civil Air Patrol
Thomas Powers	CO-DFPC NOCO SEAT BASE
Marvin Brownlee	FNLPA
Tom BARLOW	SELF
DAVID A. SMITH	FNL TOWER ATM
ARON SWYERS	BA GROUP
RICK TUCKEY	FNL PILOTS ASSN.

Regular Meeting Minutes for May 15, 2025

CALL TO ORDER Meeting called to order at 3:05 p.m.

ROLL CALL Commission Members Arndt, Marsh, Thompson, Williams, DiMartino, Miller, and Stooksbury were present.

PUBLIC COMMENT Chair Arndt opened the floor for public comment:

- Scott Holst with Discovery Air requested that public comment be allowed following each agenda item.
  He also voiced concern about the bids for the Runway 15-33 widening project, noting that the lowest one came in $2.4 million over the engineer's estimate. Mr. Holst referenced a runway widening project at Yampa Valley Regional Airport, which was completed in just 60 days.
  Additionally, he shared information about an air traffic control tower at Coeur d'Alene Airport that was constructed using shipping containers for approximately $300,000.
- Tom Barlow thanked Director Kinney for acquiring an aircraft tracking system from Virtower, which will be available for use by air traffic controllers. He requested additional information regarding the timeline for implementation.
  Mr. Barlow expressed concern about the stakeholder meeting for the upcoming airshow being scheduled for the Friday before Memorial Day.
  He also voiced opposition to the proposed increase in airport badge fees, citing comparative cost data from other nearby airports.
  Lastly, Mr. Barlow requested information on the anticipated operating and maintenance costs for the new terminal and the widened runway.
- Nick Johnson with Landline expressed concern about the parking revenue projected in next year's budget, noting that Landline has repeatedly warned that implementing parking fees would discourage passengers from using the service.
  He stated that imposing fees without offering added value, such as airside-to-airside shuttle service, could jeopardize the company's ability to continue operations at FNL.
  Mr. Johnson requested direct engagement with Airport administration to collaborate on a mutually beneficial solution.
- Rick Turley, representing the C Hangar tenants and the FNL Pilots Association, expressed the view that a new structural evaluation of the C Hangars is unnecessary. He noted the hangars generate approximately $160,000 in annual revenue for the Airport, and that recent improvements to their structural integrity cost around

$90,000. Mr. Turley stated that the previous evaluation conducted by Knott Laboratories was credible and advocated for continued inspection and maintenance rather than a new study.
He also voiced frustration over the lack of feedback regarding a proposal to construct new hangars on Site C following the recent Request for Expressions of Interest (REOI). He expressed concern over the absence of clear guidance from Airport staff on what information would be required for a successful proposal.
In addition, Mr. Turley opposed the proposed increase in badging fees and raised concerns about the potential for sensitive information to be compromised. He emphasized that badging fees should be limited to cost recovery and not serve as a profit center for the Airport.

- Terry Cecil, owner of Professional Aircraft Service, stated that he has submitted a proposal to build a new facility on Site B and expressed concern that Airport staff were recommending that Site B be reserved for non-aeronautical development. He stated he has explored options to build on other sites, but that none of them were suitable for his business needs. He requested the ability to continue to advance his proposal on Site B.

PUBLIC COMMENT FOLLOW-UP

- Commissioner Marsh requested additional information on the shipping container air traffic control tower. She also asked for the timing of the stakeholder meeting for the airshow to be reevaluated.
- Chair Arndt stated that public comment will be offered after all action items on the agenda.

CONSENT AGENDA

Commissioner DiMartino moved to approve the consent agenda with the exception of item #3. The motion, seconded by Commissioner Williams, carried with all present Commissioners voting in favor thereof.

Pulled Items: Commissioner Stooksbury pulled Item #3 - Airport Staff's Follow-Up To Commission Requests For Additional Information/Recommendation.

Consent Follow up: None

Public Comment: None

REGULAR AGENDA

3. AIRPORT STAFF'S FOLLOW-UP TO COMMISSION REQUESTS FOR ADDITIONAL INFORMATION /RECOMMENDATION

- Commissioner Stooksbury emphasized the importance of making a decision regarding the status of Runway 6-24, which remains closed due to line-of-sight issues between the temporary air traffic control tower and the terminal building.
    - Commissioner Miller added that there may be additional concerns affecting the runway beyond the line-of-sight issue.
    - Director Kinney stated that the FAA does not support the continued use of runway 6-24 as an active runway and will not participate in funding any improvements to it. He noted that there is no quick or easy solution to the issue.
    - Staff was instructed to prepare more detailed information on the runway issue for the next Commission meeting
- Commissioner Stooksbury stated that the Cities and the Airport need a clear strategic vision for where specific types of development should occur. He emphasized the importance of improved planning to guide future development decisions.
- Commissioner Marsh requested historical information on runway 6-24 activity.
- Chair Arndt emphasized the importance of the Airport Commission focusing on policy and not operational issues.
- Commissioner Williams requested information about the previous structural evaluations of the C Hangars and the rationale for conducting an additional assessment.
    - Director Kinney responded that there were discrepancies between the two previous evaluations. He noted that Airport staff have observed potential unresolved structural issues and believe a new evaluation is necessary to accurately assess the condition of the buildings and to develop a comprehensive maintenance plan. The cost of the new evaluation is estimated to be between $10,000 and $12,000.

6. 2024 FINANCIAL AUDIT

This item was tabled so that more complete information could be prepared and presented at the next meeting.

7. CAPITAL IMPROVEMENT PLAN 2026-2030

Director Kinney presented the Capital Improvement Plan (CIP), which is a planning document that will be finalized later in the year following coordination with the FAA and CDOT Aeronautics.

- The main project for 2025 and 2026 is the widening of runway 15-33.
- The environmental analysis for a new air traffic control tower will be applicable to either a traditional tower or a digital tower. A decision on which type of tower to implement must be made in 2027.

- There are 14 projects listed at the end of the document that currently do not have an identified funding source.
- Commissioner Marsh asked whether a new fuel farm or a parallel runway are included in the current Capital Improvement Plan (CIP). Director Kinney responded that neither project is included at this time.

8. 2026 AIRPORT BUDGET RECOMMENDATION

Director Kinney presented the 2026 budget.

- The budget projects reduced operating costs and increased revenues, primarily from landing fees and parking.
- The budget accounts for anticipated revenue reductions from the runway 15-33 widening project.
- Recent conversations with the FAA indicate that the locally funded portion of the runway 15-33 widening project will be approximately $540,000.
- Significant increases in revenue are necessary to help fund the CIP.
- The budget includes revenue projections that may vary depending on the timing of new fee implementations, particularly parking and the badging fee increase.
- Significant revenue increases are necessary to sustain current operations and service levels, as well as to help fund the (CIP).
- Last year, the Commission approved the budget in October; however, this year's timeline has been accelerated to allow for a more thorough review by the City Manager's Office.

Commissioner Marsh moved to recommend approving the 2026 airport budget and recommend approval by the City Councils of Fort Collins and Loveland. The motion, seconded by Commissioner DiMartino, carried with all Commissioners present voting in favor thereof.

9. RUNWAY 15-33 WIDENING CONTRACT AWARD AND ACCEPTANCE OF PENDING FAA AND CDOT GRANTS IN 2025 AND 2026 RECOMMENDATION

Airport Operations Manager, Dylan Swanson presented the item requesting that the Airport Commission recommend the City Councils approve a construction contract with Holcim-WCR, Inc. for the Runway 15-33 widening project. He also requested that the Commission recommend approval of pending grant funding from the FAA and CDOT, with a total local match not to exceed $800,000.

- The Airport received five bids for the construction phase of the Runway 15-33 widening project through a competitive solicitation process.
    - The lowest bid, obtained from Holcim-WCR, Inc., exceeded the engineer's estimate by approximately $2.4 million. The FAA has indicated its intent to fund the majority of this gap.
- The locally funded amount for the construction is currently estimated at $540,000. This amount will be finalized in September.

- Federal prequalification requirements were followed, and references were contacted to evaluate Holcim's performance on similar projects.
- Commissioner DiMartino asked about the difference in runway closure duration between the Yampa Valley Regional Airport project referenced during public comment and the Runway 15-33 widening project. Operations Manager Swanson explained that the Yampa Valley project involved adding shoulders to the existing runway, while the current project requires a full-depth functional widening of the runway, which is more complex and time-intensive.
- Due to the design-bid-build delivery method with a unit-priced contract, there is minimal risk of the project exceeding the budget.
- The CIP will be updated to reflect the most recent cost estimates.

Commissioner Marsh moved to recommend that the Loveland and Fort Collins City Councils approve awarding a contract to Holcim-WCR, Inc. for construction services for the Runway 15-33 widening project. The motion was seconded by Commissioner Williams and passed unanimously, with all Commissioners present voting in favor.

Commissioner Marsh moved to recommend that the Loveland and Fort Collins City Councils approve grant agreements with the FAA and the Colorado Department of Transportation for the Runway 15-33 widening project. The motion was seconded by Commissioner Williams and passed unanimously, with all Commissioners present voting in favor.

10. AIRPORT BADGING FEE UPDATE

Airport Operations Manager, Dylan Swanson, presented the item, recommending approval of a new fee structure for airport badging.

- FNL is classified as a commercial service airport, with an approved security plan approve by the TSA.
- The Airport is proposing to modernize its badging system by implementing a new vendor solution that will increase automation and improve overall efficiency.
- The Airport currently manages approximately 1,000 badges.
- A new fee structure is being proposed, increasing the cost of Airport Operations Area (AOA) badges from $25 to $75 annually. The increase is intended to improve cost recovery, with any excess revenue allocated to airport operations, maintenance, and implementation of the Capital Improvement Plan (CIP).
- Rick Turley expressed skepticism regarding the staffing time and cost analysis used to justify the proposed fee increase.
- Jim Sampson with Scion Aviation stated that he supports an increase in badging fees but believes the proposed amount is too high, particularly the $250 deposit.
- Mike Myshatyn expressed the view that tripling the badging fee would be prohibitively expensive and argued that modernization efforts should reduce costs for the Airport.

- Terry Cecil stated that badging fees should be reasonable and supported a discounted rate for employees of airport businesses.
- Commissioner Marsh asked why a deposit is necessary, whether badges are required to be renewed annually, and if the renewal process is less time-consuming than issuing new badges.
    - Mr. Swanson stated that the TSA has indicated the current badging system cannot continue as-is, largely due to the high number of unaccounted-for badges. He explained that the proposed deposit is intended to encourage individuals to return badges when they are no longer needed, helping to reduce the number of unaccounted-for badges. He also noted that AOA badges must be renewed annually, and that the renewal process is slightly less time-consuming than issuing a new badge.
- Commissioner Miller said he'd be more inclined to support the badging fee increase if badges are required to exit the airport in addition to entering it.
- After consulting with other airports and the American Association of Airport Executives (AAAE), staff identified three potential vendors—each offering similar capabilities and cost structures.

Commissioner Marsh moved to table the item until the next meeting, directing staff to revise the proposed badging changes to include additional options and information related to cost recovery, fee structures at comparable airports, and potential phasing of fee increases. The revised proposal should prioritize security, fiscal responsibility, fairness to users, and practical implementation. The motion, seconded by Commissioner Miller, carried with all Commissioners present voting in favor thereof.

11. BUSINESS FROM MEMBERS

Two new meetings were scheduled:

- A new Airport Commission meeting was scheduled for June 16th at 3:00.
- A new Airport Commission meeting was scheduled for September 30th at 3:00

ADJOURNMENT

Chair Arndt adjourned the meeting at 5:30 p.m.

Respectfully Submitted,

_____

Airport Commission Chair, Jenny Arndt

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REGIONAL AIRPORT
4900 Earhart Rd • Loveland, Colorado 80538
(970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER: 2

MEETING DATE: June 16, 2025

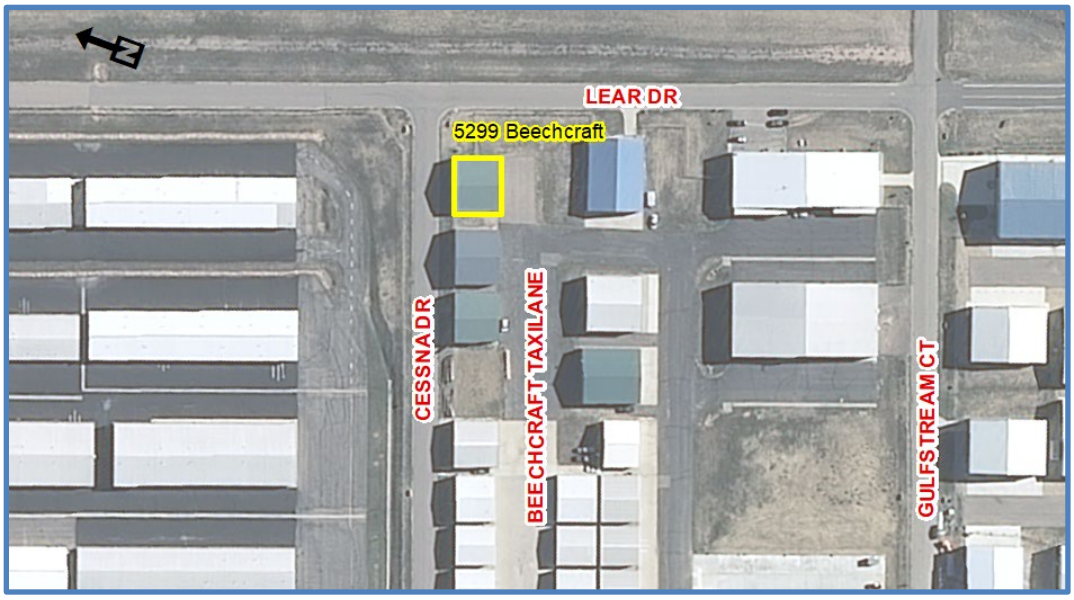
PREPARED BY: Aaron Ehle, Planning & Business Development Specialist

TITLE
Lease Extension Request – 5299 Beechcraft

RECOMMENDED AIRPORT COMMISSION ACTION
Approve the lease extension request as presented

BUDGET IMPACT
Neutral, the lease rates will remain unchanged

SUMMARY
This is an administrative item. The lease agreement was executed on October 3, 2000 and the initial 25-year term will expire on October 2, 2025. The lessee has notified the Airport (as required by the lease agreement) of their intent to exercise the option of extending their land lease agreement. This is the first of three five-year extensions options. This extension request requires the approval of the Airport Commission as specified by the intergovernmental agreement (IGA) between the Cities of Fort Collins and Loveland. Airport staff have reviewed the request and confirmed that the associated account is in good standing, with no outstanding issues or obligations.



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ITEM NUMBER: 3

MEETING DATE: June 16, 2025

PREPARED BY: Aaron Ehle, Airport Planning & Development Specialist

TITLE

CDOT Aeronautics Discretionary Aviation Grant Resolution

RECOMMENDED AIRPORT COMMISSION ACTION

Make a motion to approve Resolution R-6-2025 authorizing the City Managers to sign a Discretionary Aviation Grant Resolution from the Colorado Department of Transportation (CDOT) Division of Aeronautics

BUDGET IMPACT

Positive: The grant will provide $250,000 in funding for the Runway 15-33 widening project

SUMMARY

The Resolution from the CDOT Aeronautics Division requests $250,000 in grant funding, to be matched by an equal local contribution, for the upcoming Runway 15-33 widening project. It confirms that sufficient local matching funds are available and designates Airport Director John Kinney as the Project Director.

The Amended and Restated IGA for the Joint Operation of the Airport approved by both City Councils in 2016 allows the Airport Commission the authority to enter into grant agreements to the extent permitted by grantors, so long as such grant agreements:

i. do not include commitment of Airport revenues and funds for grant matches of more than $300,000 from appropriated funds included in the approved Airport budget;
ii. do not involve capital construction projects unless such projects are included in the approved Airport budget; and
iii. are approved by the City Managers, to the extent the City Managers are authorized by their respective City Councils to do so

ATTACHMENTS

- Resolution R-6-2025
  - Exhibit A – CDOT Grant Assurances
  - Exhibit B – CDOT Grant Agreement

RESOLUTION # R-6-2025

A RESOLUTION APPROVING THE 2025 GRANT AGREEMENT WITH THE STATE OF COLORADO DIVISION OF AERONAUTICS (CDAG #25-FNL-01) FOR THE RUNWAY WIDENING DESIGN PROJECT AT THE NORTHERN COLORADO REGIONAL AIRPORT

WHEREAS, the General Assembly of the State of Colorado has declared in Title 43 of the Colorado Revised Statutes, Article 10, 1991 in C.R.S. 43-10-101 ("the Act") that: ". . . there exists a need to promote the safe operation and accessibility of general aviation and intrastate commercial aviation in this state; that improvement of general aviation and intrastate commercial aviation transportation facilities will promote diversified economic development across the state; and that accessibility to airport facilities for residents of this state is crucial in the event of a medical or other type of emergency;" and

WHEREAS, the Act created the Colorado Aeronautical Board ("the Board") to establish policy and procedures for distribution of monies in the Aviation Fund and created the Division of Aeronautics ("the Division") to carry out the directives of the Board, including technical and planning assistance to airports and the administration of the state aviation system grant program. (See C.R.S. §43-10-103, C.R.S. §43-10-105, and C.R.S. §43-10-108.5 of the Act); and

WHEREAS, any eligible entity operating a public-accessible airport in the state may file an application for and be a recipient of a grant to be used solely for aviation purposes (an "Application"). The Division is authorized to assist such airports as request assistance by means of a Resolution passed by the applicant's duly-authorized governing body, which understands that all funds shall be used exclusively for aviation purposes and that it will comply with all grant procedures and requirements as defined in the Division's Program and Procedures Manual ("the Manual") and the Airport Sponsor Assurances for Colorado Discretionary Aviation Grant Funding ("Grant Assurances") attached hereto as "**Exhibit A**;" and

WHEREAS, the City of Fort Collins and the City of Loveland ("the Cities") own and operate in the State the Northern Colorado Regional Airport ("the Airport") pursuant to that certain Amended and Restated Intergovernmental Agreement for the Joint Operation of the Fort Collins-Loveland Municipal Airport dated January 22, 2015, as amended ("Airport IGA"); and

WHEREAS, the Cities have applied for grant CDAG #25-FNL-01 (the "Grant Agreement") from the Division for the purpose of providing funding for the runway widening design project at the Northern Colorado Regional Airport (the "Project"); and

WHEREAS, the Grant Agreement ("Grant Agreement") is attached hereto as "**Exhibit B**" and incorporated by reference; and

WHEREAS, the Grant Agreement provides to the Airport Two Hundred Fifty Thousand Dollars ($250,000.00) (the "State Grant") representing one and forty-three hundredths percent (1.43%) of the total 2025 fiscal year cost of Seventeen Million Four Hundred Forty-Seven

Thousand Nine Hundred Ninety-Four Dollars ($17,447,994.00) for the Project, subject to the Cities providing a one and forty-three hundredths percent (1.43%) local match for the Project; and

WHEREAS, a total of Two Hundred Fifty Thousand Dollars ($250,000.00) of additional local funding in the Airport Fund will be applied toward this Project, in addition to this State Grant, which additional funding has previously been appropriated and approved by the Northern Colorado Regional Airport Commission and both City Councils through the adoption of the 2025 Airport Budget; and

WHEREAS, this State Grant combined with matching local funds required for a portion of the Project will provide funding of the required two and eighty-six hundredths percent (2.86%) grant match requirement; and

WHEREAS, pursuant to Section 4.J of the Airport IGA, the Commission is authorized to sign grant agreements to the extent permitted by grantors, so long as such grant agreements meet the standards set forth therein, including approval by the City Managers of both Cities to the extent they are authorized by their respective City Councils to do so.

NOW THEREFORE BE IT RESOLVED BY THE NORTHERN COLORADO REGIONAL AIRPORT COMMISSION AS FOLLOWS:

Section 1. That the Northern Colorado Regional Airport Commission ("the Commission"), pursuant to its authority under the Airport IGA to approve the Grant Agreement, attached hereto as "**Exhibit B**" and incorporated herein, on behalf of the Cities as the grant applicant, hereby formally requests assistance from the Colorado Aeronautical Board and the Division of Aeronautics in the form of a state aviation system grant. The Commission states that such State Grant shall be used solely for aviation purposes, as determined by the State, and as generally described in the Application.

Section 2. That the Commission, on behalf of the Cities, makes the commitment (a) to keep the Airport facility accessible to, and open to, the public during the entire useful life of the grant funded improvements/equipment; or (b) to reimburse the Division for any unexpired useful life of the improvements/equipment on a pro-rata basis. By signing the Grant Agreement, the Commission further commits, on behalf of the Cities, to keep open and accessible for public use all grant funded facilities, improvements and services for their useful life, as determined by the Division and stated in the Grant Agreement.

Section 3. That the Commission, on behalf of the Cities, hereby designates John Kinney, Airport Director, as the Project Director, as described in the Manual, and authorizes the Project Director to act in all matters relating to the work project proposed in the Application on its behalf, and further authorizes the City Managers of the Cities to execute the Grant Agreement with such modifications in form or substance as the City Managers, in consultation with their respective City Attorney's Offices, may deem necessary to effectuate the purposes of this Resolution or to

protect the interests of the Cities to reflect approval of the City Managers, to the extent that they have been authorized to do so by their respective City Councils.

Section 4. That the Cities have appropriated or will appropriate or otherwise make available in a timely manner their share of all funds that are required to be provided by the Cities under the terms and conditions of the Grant Agreement.

Section 5. That on behalf of the Cities and subject to the foregoing, the Commission hereby accepts all guidelines, procedures, standards, and requirements described in the Manual as applicable to the performance of the grant work and hereby approves the Grant Agreement submitted by the State, including all terms and conditions contained therein.

Section 6. That this Resolution shall be effective as of the date and time of its adoption.

ADOPTED this 16th day of June, 2025.

_____
Jeni Arndt, Chair of the
Northern Colorado Regional Airport Commission

ATTEST:

_____
Secretary

APPROVED AS TO FORM:

Laurie Wilson, Deputy City Attorney

EXHIBIT A, GRANT ASSURANCES

Airport Sponsor Assurances for Colorado Discretionary Aviation Grant Funding

Approved by CAB January 22, 2018

I. APPLICABILITY

a. These assurances shall be complied with by Airport Sponsors in the performance of all projects at airports that receive Colorado Department of Transportation – Division of Aeronautics (Division) Colorado Discretionary Aviation Grant (CDAG) funding for projects including but not limited to: master planning, land acquisition, equipment acquisition or capital improvement projects (Project). It is not the intent of these Assurances to expand existing Federal Aviation Administration (FAA) Grant Assurances for airports included in the National Plan of Integrated Airport Systems (NPIAS); as similar assurances already exist for acceptance of FAA funding.

b. Upon acceptance of this grant agreement these assurances are incorporated in and become a part thereof.

II. DURATION

a. The terms, conditions and assurances of the grant agreement shall remain in full force and effect throughout the useful life of the Project as defined in Table 1 (Useful Life), or if the airport for which the Project is funded ceases to function as a public airport, for twenty (20) years from the date of Project completion, whichever period is greater. However, there shall be no limit on the duration of the assurances with respect to real property acquired with CDAG Project funds.

III. COMPLIANCE

a. Should an Airport Sponsor be notified to be in non-compliance with any terms of this agreement, they may become ineligible for future Division funding until such non-compliance is cured.

b. If any Project is not used for aviation purposes during its Useful Life, or if the airport for which the Project is funded ceases to function as a public airport, for twenty (20) years from the date of Project completion or at any time during the estimated useful life of the Project as defined in Table 1, whichever period is greater, the Airport Sponsor may be liable for repayment to the Division of any or all funds contributed by the Division under this agreement. If the airport at which the Project is constructed is abandoned for any reason, the Division may in its discretion discharge the Airport Sponsor from any repayment obligation upon written request by the Airport Sponsor.

IV. AIRPORT SPONSOR GRANT ASSURANCES

1. **Compatible Land Use.** Compatible land use and planning in and around airports benefits the state aviation system by providing opportunities for safe airport development, preservation of airport and aircraft operations, protection of airport approaches, reduced potential for litigation and compliance with appropriate airport design standards. The airport will take appropriate action, to the extent reasonable, to restrict the use of land adjacent to, in the immediate vicinity of, or on the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft.

2. **On-Airport Hazard Removal and Mitigation**. The airport will take appropriate action to protect aircraft operations to/from the airport and ensure paths are adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

3. **Safe, Efficient Use, and Preservation of Navigable Airspace.** The airport shall comply with 14 CFR Part 77 for all future airport development and anytime an existing airport development is altered.

4. **Operation and Maintenance.** In regards to Projects that receive Division funding, the airport sponsor certifies that it has the financial or other resources that may be necessary for the preventive maintenance, maintenance, repair and operation of such projects during their Useful Life.

The airport and all facilities which are necessary to serve the aeronautical users of the airport shall be operated at all times in a safe and serviceable condition. The airport will also have in effect arrangements for:

a. Operating the airport's aeronautical facilities whenever required;

b. Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and

c. Promptly notifying airmen of any condition affecting aeronautical use of the airport.

5. **Airport Revenues.** All revenues generated by the airport will be expended by it for the capital or operating costs of the airport, the local airport system, or other local facilities owned or operated by the owner or operator of the airport for aviation purposes.

6. **Airport Layout Plan (ALP).** Once accomplished and as otherwise may be required to develop, it will keep up-to-date a minimum of an ALP of the airport showing (1) boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto; (2) the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), including all proposed extensions and reductions of existing airport facilities; and (3) the location of all existing improvements thereon.

7. **Use for Aviation Purposes.** The Airport Sponsor shall not use runways, taxiways, aprons, seeded areas or any other appurtenance or facility constructed, repaired, renovated or maintained under the terms of this Agreement for activities other than aviation purposes unless otherwise exempted by the Division.

TABLE 1

Project Type	Useful Life
a. All construction projects (unless listed separately below)	20 years
b. All equipment and vehicles	10 years
c. Pavement rehabilitation (not reconstruction, which is 20 years)	10 years
d. Asphalt seal coat, slurry seal, and joint sealing	3 years
e. Concrete joint replacement	7 years
f. Airfield lighting and signage	10 years
g. Navigational Aids	15 years
h. Buildings	40 years
i. Land	Unlimited

in this Agreement and Grantee's final reimbursement request or invoice. In accordance with the Agreement, the State may withhold a percentage of allowable costs until all final documentation has been submitted and accepted by the State as substantially complete.

17. Assignment. Grantee's rights and obligations under this Agreement may not be transferred or assigned without the prior, written consent of the State and execution of a new agreement. Any attempt at assignment or transfer without such consent and new agreement shall be void. Any assignment or transfer of Grantee's rights and obligations approved by the State shall be subject to the provisions of this Agreement.

18. Subcontracts. Grantee shall not enter into any subcontract in connection with its obligations under this Agreement without the prior, written approval of the State. Grantee shall submit to the State a copy of each subcontract upon request by the State. All subcontracts entered into by Grantee in connection with this Agreement shall comply with all applicable federal and state laws and regulations, shall provide that they are governed by the laws of the State of Colorado, and shall be subject to all provisions of this Agreement.

19. Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect, provided that the Parties can continue to perform their obligations in accordance with the intent of the Agreement.

20. Survival of Certain Agreement Terms. Any provision of this Agreement that imposes an obligation on a party after termination or expiration of the Agreement shall survive the termination or expiration of the Agreement and shall be enforceable by the other party.

21. Third Party Beneficiaries. Except for the parties' respective successors and assigns, this Agreement does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. Enforcement of this Agreement and all rights and obligations hereunder are reserved solely to the parties. Any services or benefits which third parties receive as a result of this Agreement are incidental to the Agreement, and do not create any rights for such third parties.

22. Waiver. A party's failure or delay in exercising any right, power, or privilege under this Agreement, whether explicit or by lack of enforcement, shall not operate as a waiver, nor shall any single or partial exercise of any right, power, or privilege preclude any other or further exercise of such right, power, or privilege.

23. Indemnification. [***Not Applicable to Inter-governmental agreements***] Grantee shall indemnify, save, and hold harmless the State, its employees, agents and assignees (the "Indemnified Parties"), against any and all costs, expenses, claims, damages, liabilities, court awards and other amounts (including attorneys' fees and related costs) incurred by any of the Indemnified Parties in relation to any act or omission by Grantee, or its employees, agents, Subcontractors, or assignees in connection with this Agreement. This shall include, without limitation, any and all costs, expenses, claims, damages, liabilities, court awards and other amounts incurred by the Indemnified Parties in relation to any claim that any work infringes a patent, copyright, trademark, trade secret, or any other intellectual property right or any claim for loss or improper disclosure of any confidential information or personally identifiable information. If Grantee is a public agency prohibited by applicable law from indemnifying any party, then this section shall not apply.

24. Notice. All notices given under this Agreement shall be in writing, and shall be delivered to the contacts for each party listed on the face of the Small Dollar Grant Award. Either party may change its contact or contact information by notice submitted in accordance with this section without a formal modification to this Agreement.

25. Insurance. Except as otherwise specifically stated in this Agreement or any attachment or exhibit to this Agreement, Grantee shall obtain and maintain insurance as specified in this section at all times during the term of the Agreement: (a) workers' compensation insurance as required by state statute, and employers' liability insurance covering all Grantee employees acting within the course and scope of their employment, (b) Commercial general liability insurance written on an Insurance Services Office occurrence form, covering premises operations, fire damage, independent contractors, products and completed operations, blanket contractual liability, personal injury, and advertising liability with minimum limits as follows: $1,000,000 each occurrence; $1,000,000 general aggregate; $1,000,000 products and completed operations aggregate; and $50,000 any one fire, and (c) Automobile liability insurance covering any auto (including owned, hired and non-owned autos) with a minimum limit of $1,000,000 each accident combined single limit. If Grantee will or may have access to any protected information, then Grantee shall also obtain and maintain insurance covering loss and disclosure of protected information and claims based on alleged violations of privacy right through improper use and disclosure of protected information with limits of $1,000,000 each occurrence and $1,000,000 general aggregate at all times during the term of the Small Dollar Grant Award. Additional insurance may be required as provided elsewhere in this Agreement or any attachment or exhibit to this Agreement. All insurance policies required by this Agreement shall be issued by insurance companies with an AM Best rating of A-VIII or better. If Grantee is a public agency within the meaning of the Colorado Governmental Immunity Act, then this section shall not apply and Grantee shall instead comply with the Colorado Governmental Immunity Act.

26. Termination Prior to Grantee Acceptance. If Grantee has not begun performance under this Agreement, the State may cancel this Agreement by providing written notice to the Grantee.

27. Termination for Cause. If Grantee refuses or fails to timely and properly perform any of its obligations under this Agreement with such diligence as will ensure its completion within the time specified in this Agreement, the State may notify Grantee in writing of non-performance and, if not corrected by Grantee within the time specified in the notice, terminate Grantee's right to proceed with the Agreement or such part thereof as to which there has been delay or a failure. Grantee shall continue performance of this Agreement to the extent not terminated. Grantee shall be liable for excess costs incurred by the State in procuring similar Work and the State may withhold such amounts, as the State deems necessary. If after rejection, revocation, or other termination of Grantee's right to proceed under the Colorado Uniform Commercial Code (CUCC) or this clause, the State determines for any reason that Grantee was not in default or the delay was excusable, the rights and obligations of the State and Grantee shall be the same as if the notice of termination had been issued pursuant to termination under **§28**.

28. Termination in Public Interest. The State is entering into this Agreement for the purpose of carrying out the public interest of the State, as determined by its Governor, General Assembly, Courts, or Federal Awarding Agency. If this Agreement ceases to further the public interest of the State as determined by its Governor, General Assembly, Courts, or Federal Awarding Agency, the State, in its sole discretion, may terminate this Agreement in whole or in part and such termination shall not be deemed to be a breach of the State's obligations hereunder. This section shall not apply to a termination for cause, which shall be governed by **§27**. A determination that this Small Dollar Grant Award should be terminated in the public interest shall not be equivalent to a State right to terminate for convenience. The State shall give written notice of termination to Grantee specifying the part of the Agreement terminated and when termination becomes effective. Upon receipt of notice of termination, Grantee shall not incur further obligations except as necessary to mitigate costs of performance. The State shall pay the Agreement price or rate for Work performed

and accepted by State prior to the effective date of the notice of termination. The State's termination liability under this section shall not exceed the total Agreement price.

29. Termination for Funds Availability. The State is prohibited by law from making commitments beyond the term of the current State Fiscal Year. Payment to Grantee beyond the current State Fiscal Year is contingent on the appropriation and continuing availability of Grant Funds in any subsequent year (as provided in the Colorado Special Provisions). If federal funds or funds from any other non-State funds constitute all or some of the Grant Funds, the State's obligation to pay Grantee shall be contingent upon such non-State funding continuing to be made available for payment. Payments to be made pursuant to this Agreement shall be made only from Grant Funds, and the State's liability for such payments shall be limited to the amount remaining of such Grant Funds. If State, federal or other funds are not appropriated, or otherwise become unavailable to fund this Agreement, the State may, upon written notice, terminate this Agreement, in whole or in part, without incurring further liability. The State shall, however, remain obligated to pay for Work performed and accepted prior to the effective date of notice of termination, and this termination shall otherwise be treated as if this Agreement were terminated in the public interest as described in **§28**.

30. Grantee's Termination Under Federal Requirements. If the Grant Funds include any federal funds, then Grantee may request termination of this Grant by sending notice to the State, or to the Federal Awarding Agency with a copy to the State, which includes the reasons for the termination and the effective date of the termination. If this Grant is terminated in this manner, then Grantee shall return any advanced payments made for Work that will not be performed prior to the effective date of the termination.

31. Governmental Immunity. Liability for claims for injuries to persons or property arising from the negligence of the State, its departments, boards, commissions committees, bureaus, offices, employees and officials shall be controlled and limited by the provisions of the Colorado Governmental Immunity Act, CRS §24-10-101, *et seq*., the Federal Tort Claims Act, 28 U.S.C. Pt. VI, Ch. 171 and 28 U.S.C. 1346(b), and the State's risk management statutes, CRS §§24-30-1501, *et seq*. No term or condition of this Agreement shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, contained in these statutes.

32. Grant Recipient. Grantee shall perform its duties hereunder as a grant recipient and not as an employee. Neither Grantee nor any agent or employee of Grantee shall be deemed to be an agent or employee of the State. Grantee shall not have authorization, express or implied, to bind the State to any agreement, liability or understanding, except as expressly set forth herein. **Grantee and its employees and agents are not entitled to unemployment insurance or workers compensation benefits through the State and the State shall not pay for or otherwise provide such coverage for Grantee or any of its agents or employees. Grantee shall pay when due all applicable employment taxes and income taxes and local head taxes incurred pursuant to this Agreement. Grantee shall (a) provide and keep in force workers' compensation and unemployment compensation insurance in the amounts required by law, (b) provide proof thereof when requested by the State, and (c) be solely responsible for its acts and those of its employees and agents.**

33. Compliance with Law. Grantee shall comply with all applicable federal and State laws, rules, and regulations in effect or hereafter established, including, without limitation, laws applicable to discrimination and unfair employment practices.

34. Choice of Law, Jurisdiction and Venue. [***Not Applicable to Inter-governmental agreements***] Colorado law, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this Agreement. Any provision included or incorporated herein by reference which conflicts with said laws, rules, and regulations shall be null and void. All suits or actions related to this Agreement shall be filed and proceedings held in the State of Colorado and exclusive venue shall be in the City and County of Denver. Any provision incorporated herein by reference which purports to negate this or any other provision in this Agreement in whole or in part shall not be valid or enforceable or available in any action at law, whether by way of complaint, defense, or otherwise. Any provision rendered null and void by the operation of this provision or for any other reason shall not invalidate the remainder of this Agreement, to the extent capable of execution. Grantee shall exhaust administrative remedies in CRS §24-109-106, prior to commencing any judicial action against the State regardless of whether the Colorado Procurement Code applies to this Agreement.

35. Prohibited Terms. Nothing in this Agreement shall be construed as a waiver of any provision of CRS §24-106-109. Any term included in this Agreement that requires the State to indemnify or hold Grantee harmless; requires the State to agree to binding arbitration; limits Grantee's liability for damages resulting from death, bodily injury, or damage to tangible property; or that conflicts with that statute in any way shall be void ab initio.

36. Public Contracts for Services. [***Not Applicable to offer, issuance, or sale of securities, investment advisory services, fund management services, sponsored projects, intergovernmental grant agreements, or information technology services or products and services***] Grantee certifies, warrants, and agrees that it does not knowingly employ or contract with an illegal alien who will perform work under this Agreement and will confirm the employment eligibility of all employees who are newly hired for employment in the United States to perform work under this Agreement, through participation in the E-Verify Program or the Department program established pursuant to CRS §8-17.5-102(5)(c), Grantee shall not knowingly employ or contract with an illegal alien to perform work under this Agreement or enter into a contract or agreement with a Subcontractor that fails to certify to Grantee that the Subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this Agreement. Grantee shall (a) not use E-Verify Program or Department program procedures to undertake pre- employment screening of job applicants during performance of this Agreement, (b) notify Subcontractor and the State within three days if Grantee has actual knowledge that Subcontractor is employing or contracting with an illegal alien for work under this Agreement, (c) terminate the subcontract if Subcontractor does not stop employing or contracting with the illegal alien within three days of receiving notice, and (d) comply with reasonable requests made in the course of an investigation, undertaken pursuant to CRS §8-17.5-102(5), by the Colorado Department of Labor and Employment. If Grantee participates in the Department program, Grantee shall deliver to the State a written, notarized affirmation that Grantee has examined the legal work status of such employee, and shall comply with all of the other requirements of the Department program. If Grantee fails to comply with any requirement of this provision or CRS §8-17.5-101 et seq., the State may terminate this Agreement for breach and, if so terminated, Grantee shall be liable for damages.

37. Public Contracts with Natural Persons. Grantee, if a natural person 18 years of age or older, hereby swears and affirms under penalty of perjury that the person (a) is a citizen or otherwise lawfully present in the United States pursuant to federal law, (b) shall comply with the provisions of CRS §24-76.5-101 et seq., and (c) has produced a form of identification required by CRS §24-76.5-103 prior to the date Grantee begins Work under terms of the Agreement.

STATE CONTROLLER

ADDENDUM 1:
Additional Terms & Conditions for Information Technology

IF ANY PART OF THE SUBJECT MATTER OF THIS AGREEMENT IS INFORMATION TECHNOLOGY, AS DEFINED IN CRS § 24-37.5-102 (2), THE FOLLOWING PROVISIONS ALSO APPLY TO THIS AGREEMENT.

A. Definitions. The following terms shall be construed and interpreted as follows: **(a)** "**CJI**" means criminal justice information collected by criminal justice agencies needed for the performance of their authorized functions, including, without limitation, all information defined as criminal justice information by the U.S. Department of Justice, Federal Bureau of Investigation, Criminal Justice Information Services Security Policy, as amended, and all Criminal Justice Records as defined under CRS §24-72-302; **(b)** "**Incident**" means any accidental or deliberate event that results in or constitutes an imminent threat of the unauthorized access, loss, disclosure, modification, disruption, or destruction of any communications or information resources of the State, pursuant to CRS §§24-37.5-401 *et seq*.; **(c)** "**PCI**" means payment card information including any data related to credit card holders' names, credit card numbers, or the other credit card information as may be protected by state or federal law; **(d)** "**PHI**" means any protected health information, including, without limitation any information whether oral or recorded in any form or medium that relates to the past, present or future physical or mental condition of an individual; the provision of health care to an individual; or the past, present or future payment for the provision of health care to an individual; and that identifies the individual or with respect to which there is a reasonable basis to believe the information can be used to identify the individual including, without limitation, any information defined as Individually Identifiable Health Information by the federal Health Insurance Portability and Accountability Act; **(e)** "**PII**" means personally identifiable information including, without limitation, any information maintained by the State about an individual that can be used to distinguish or trace an individual's identity, such as name, social security number, date and place of birth, mother's maiden name, or biometric records, including, without limitation, all information defined as personally identifiable information in CRS §24-72-501; **(f)** "**State Confidential Information**" means any and all State Records not subject to disclosure under the Colorado Open Records Act and includes, without limitation, PII, PHI, PCI, Tax Information, CJI, and State personnel records not subject to disclosure under the Colorado Open Records Act, **(g)** "**State Fiscal Rules**" means those fiscal rules promulgated by the Colorado State Controller pursuant to CRS §24-30-202(13)(a); **(h)** "**State Fiscal Year**" means a 12 month period beginning on July 1 of each calendar year and ending on June 30 of the following calendar year; **(i)** "**State Records**" means any and all State data, information, and records, regardless of physical form; **(j)** "**Tax Information**" means federal and State of Colorado tax information including, without limitation, federal and State tax returns, return information, and such other tax-related information as may be protected by federal and State law and regulation, including, without limitation all information defined as federal tax information in Internal Revenue Service Publication 1075; and **(k)** "**Work Product**" means the tangible and intangible results of the delivery of goods and performance of services, whether finished or unfinished, including drafts. Work Product includes, but is not limited to, documents, text, software (including source code), research, reports, proposals, specifications, plans, notes, studies, data, images, photographs, negatives, pictures, drawings, designs, models, surveys, maps, materials, ideas, concepts, know-how, information, and any other results of the Work, but does not include any material that was developed prior to the Effective Date that is used, without modification, in the performance of the Work.

B. Intellectual Property. Except to the extent specifically provided elsewhere in this Agreement, any State information, including without limitation pre-existing State software, research, reports, studies, data, photographs, negatives or other documents, drawings, models, materials; or Work Product prepared by Grantee in the performance of its obligations under this Agreement shall be the exclusive property of the State (collectively, "State Materials"). All State Materials shall be delivered to the State by Grantee upon completion or termination of this Agreement. The State's exclusive rights in any Work Product prepared by Grantee shall include, but not be limited to, the right to copy, publish, display, transfer, and prepare derivative works. Grantee shall not use, willingly allow, cause or permit any State Materials to be used for any purpose other than the performance of Grantee's obligations hereunder without the prior written consent of the State. The State shall maintain complete and accurate records relating to **(a)** its use of all Grantee and third party software licenses and rights to use any Grantee or third party software granted under this Agreement and its attachments to which the State is a party and **(b)** all amounts payable to Grantee pursuant to this Agreement and its attachments and the State's obligations under this Agreement or any amounts payable to Grantee in relation to this Agreement, which records shall contain sufficient information to permit Grantee to confirm the State's compliance with the use restrictions and payment obligations under this Agreement or to any third party use restrictions to which the State is a party. Grantee retains the exclusive rights, title and ownership to any and all pre-existing materials owned or licensed to Grantee including, but not limited to all pre-existing software, licensed products, associated source code, machine code, text images, audio, video, and third party materials, delivered by Grantee under the Agreement, whether incorporated in a deliverable or necessary to use a deliverable (collectively, "Grantee Property"). Grantee Property shall be licensed to the State as set forth in a State-approved license agreement **(a)** entered into as exhibits or attachments to this Agreement, **(b)** obtained by the State from the applicable third party Grantee, or **(c)** in the case of open source software, the license terms set forth in the applicable open source license agreement. Notwithstanding anything to the contrary herein, the State shall not be subject to any provision incorporated in any exhibit or attachment attached hereto, any provision incorporated in any terms and conditions appearing on any website, any provision incorporated into any click through or online agreements, or any provision incorporated into any other document or agreement between the parties that **(a)** requires the State or the State to indemnify Grantee or any other party, **(b)** is in violation of State laws, regulations, rules, State Fiscal Rules, policies, or other State requirements as deemed solely by the State, or **(c)** is contrary to this Agreement.

C. Information Confidentiality. Grantee shall keep confidential, and cause all Subcontractors to keep confidential, all State Records, unless those State Records are publicly available. Grantee shall not, without prior written approval of the State, use, publish, copy, disclose to any third party, or permit the use by any third party of any State Records, except as otherwise stated in this Agreement, permitted by law, or approved in writing by the State. If Grantee will or may have access to any State Confidential Information or any other protected information, Grantee shall provide for the security of all State Confidential Information in accordance with all applicable laws, rules, policies, publications, and guidelines. Grantee shall comply with all Colorado Office of Information Security ("OIS") policies and procedures which OIS has issued pursuant to CRS §§24-37.5-401 through 406 and 8 CCR §1501-5 and posted at http://oit.state.co.us/ois, all information security and privacy obligations imposed by any federal, state, or local statute or regulation, or by any industry standards or guidelines, as applicable based on the classification of the data relevant to Grantee's performance under this Agreement. Such obligations may arise from: Health Information Portability and Accountability Act (HIPAA); IRS Publication 1075; Payment Card Industry Data Security Standard (PCI-DSS); FBI Criminal Justice Information Service Security Addendum; Centers for Medicare & Medicaid Services (CMS) Minimum Acceptable Risk Standards for Exchanges; and Electronic Information Exchange

Security Requirements and Procedures for State and Local Agencies Exchanging Electronic Information with The Social Security Administration. Grantee shall immediately forward any request or demand for State Records to the State's principal representative.

D. Other Entity Access and Nondisclosure Agreements. Grantee may provide State Records to its agents, employees, assigns and Subcontractors as necessary to perform the work, but shall restrict access to State Confidential Information to those agents, employees, assigns, and Subcontractors who require access to perform their obligations under this Agreement. Grantee shall ensure all such agents, employees, assigns, and Subcontractors sign agreements containing nondisclosure provisions at least as protective as those in this Agreement, and that the nondisclosure provisions are in force at all times the agent, employee, assign, or Subcontractors has access to any State Confidential Information. Grantee shall provide copies of those signed nondisclosure provisions to the State upon execution of the nondisclosure provisions if requested by the State.

E. Use, Security, and Retention. Grantee shall use, hold, and maintain State Confidential Information in compliance with any and all applicable laws and regulations only in facilities located within the United States, and shall maintain a secure environment that ensures confidentiality of all State Confidential Information. Grantee shall provide the State with access, subject to Grantee's reasonable security requirements, for purposes of inspecting and monitoring access and use of State Confidential Information and evaluating security control effectiveness. Upon the expiration or termination of this Agreement, Grantee shall return State Records provided to Grantee or destroy such State Records and certify to the State that it has done so, as directed by the State. If Grantee is prevented by law or regulation from returning or destroying State Confidential Information, Grantee warrants it will guarantee the confidentiality of, and cease to use, such State Confidential Information.

F. Incident Notice and Remediation. If Grantee becomes aware of any Incident, it shall notify the State immediately and cooperate with the State regarding recovery, remediation, and the necessity to involve law enforcement, as determined by the State. Unless Grantee can establish none of Grantee or any of its agents, employees, assigns or Subcontractors are the cause or source of the Incident, Grantee shall be responsible for the cost of notifying each person who may have been impacted by the Incident. After an Incident, Grantee shall take steps to reduce the risk of incurring a similar type of Incident in the future as directed by the State, which may include, but is not limited to, developing and implementing a remediation plan that is approved by the State at no additional cost to the State. The State may adjust or direct modifications to this plan, in its sole discretion and Grantee shall make all modifications as directed by the State. If Grantee cannot produce its analysis and plan within the allotted time, the State, in its sole discretion, may perform such analysis and produce a remediation plan, and Grantee shall reimburse the State for the reasonable actual costs thereof.

G. Data Protection and Handling. Grantee shall ensure that all State Records and Work Product in the possession of Grantee or any Subcontractors are protected and handled in accordance with the requirements of this Agreement at all times. Upon request by the State made any time prior to 60 days following the termination of this Agreement for any reason, whether or not this Agreement is expiring or terminating, Grantee shall make available to the State a complete and secure download file of all data that is encrypted and appropriately authenticated. This download file shall be made available to the State within 10 Business Days following the State's request, and shall contain, without limitation, all State Records, Work Product, and any other information belonging to the State. Upon the termination of Grantee's services under this Agreement, Grantee shall, as directed by the State, return all State Records provided by the State to Grantee, and the copies thereof, to the State or destroy all such State Records and certify to the State that it has done so. If legal obligations imposed upon Grantee prevent Grantee from returning or destroying all or part of the State Records provided by the State, Grantee shall guarantee the confidentiality of all State Records in Grantee's possession and will not actively process such data. The State retains the right to use the established operational services to access and retrieve State Records stored on Grantee's infrastructure at its sole discretion and at any time.

H. Compliance. If applicable, Grantee shall review, on a semi-annual basis, all OIS policies and procedures which OIS has promulgated pursuant to CRS §§ 24-37.5-401 through 406 and 8 CCR § 1501-5 and posted at http://oit.state.co.us/ois, to ensure compliance with the standards and guidelines published therein. Grantee shall cooperate, and shall cause its Subcontractors to cooperate, with the performance of security audit and penetration tests by OIS or its designee.

I. Safeguarding PII. If Grantee or any of its Subcontractors will or may receive PII under this Agreement, Grantee shall provide for the security of such PII, in a manner and form acceptable to the State, including, without limitation, all State requirements relating to non-disclosure, use of appropriate technology, security practices, computer access security, data access security, data storage encryption, data transmission encryption, security inspections, and audits. Grantee shall take full responsibility for the security of all PII in its possession or in the possession of its Subcontractors, and shall hold the State harmless for any damages or liabilities resulting from the unauthorized disclosure or loss thereof. Grantee shall be a "Third-Party Service Provider" as defined in CRS §24-73-103(1)(i) and shall maintain security procedures and practices consistent with CRS §§24-73-101 *et seq*.

J. Software Piracy Prohibition. The State or other public funds payable under this Agreement shall not be used for the acquisition, operation, or maintenance of computer software in violation of federal copyright laws or applicable licensing restrictions. Grantee hereby certifies and warrants that, during the term of this Agreement and any extensions, Grantee has and shall maintain in place appropriate systems and controls to prevent such improper use of public funds. If the State determines that Grantee is in violation of this provision, the State may exercise any remedy available at law or in equity or under this Agreement, including, without limitation, immediate termination of this Agreement and any remedy consistent with federal copyright laws or applicable licensing restrictions.

K. Information Technology. To the extent that Grantee provides physical or logical storage of State Records; Grantee creates, uses, processes, discloses, transmits, or disposes of State Records; or Grantee is otherwise given physical or logical access to State Records in order to perform Grantee's obligations under this Agreement, the following terms shall apply. Grantee shall, and shall cause its Subcontractors, to: Provide physical and logical protection for all hardware, software, applications, and data that meets or exceeds industry standards and the requirements of this Agreement; Maintain network, system, and application security, which includes, but is not limited to, network firewalls, intrusion detection (host and network), annual security testing, and improvements or enhancements consistent with evolving industry standards; Comply with State and federal rules and regulations related to overall security, privacy, confidentiality, integrity, availability, and auditing; Provide that security is not compromised by unauthorized access to workspaces, computers, networks, software, databases, or other physical or electronic environments; Promptly report all Incidents, including Incidents that do not result in unauthorized disclosure or loss of data integrity, to a designated representative of the OIS; Comply with all rules, policies, procedures, and standards issued by the Governor's Office of Information Technology (OIT), including project lifecycle methodology and governance, technical standards, documentation, and other requirements posted at www.oit.state.co.us/about/policies. Grantee shall not allow remote access to State Records from outside the United States, including access by

Grantee's employees or agents, without the prior express written consent of OIS. Grantee shall communicate any request regarding non-U.S. access to State Records to the State. The State, acting by and through OIS, shall have sole discretion to grant or deny any such request.

NORTHERN COLORADO
REGIONAL AIRPORT
4900 Earhart Rd • Loveland, Colorado 80538
(970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER: 4
MEETING DATE: June 16, 2025
PREPARED BY: John S. Kinney – Airport Director

AIRPORT DIRECTOR'S REPORT

A. INFORMATIONAL ITEMS: No presentation – possible questions from Commissioners

1) **Airshow 2025: Scheduled for: September 20th & 21st -** Attachment #1
2) **FNL's FAA's annual FAA Part 139 Certification Safety Inspection:**
    a. Tabletop Exercise: Scenario: aircraft accident with ~30 casualties: The event will predate to the full scale on September 5, 2025.
    b. Tri-annual Full-Scale Exercise: Friday September 5th.
    c. Live Burn for ARFF personnel - annual certification: Friday September 5th.
3) **CDOT – Aeronautics Virtual tower Monthly Project Update Report -** Attachment #2
Next Month Dave Ulane CDOT / Aeronautics Director and his team from Raytheon will provide an in person update as to the FAA certification of the Raytheon Vistula tower Program.
4) **FNL's Airport's Classification -** Attachment #3
In response to the Commissions question:
Northen Colorado Regional Airport's Classification can be described in several ways based on the variety of categories and subcategories used by federal agencies. The "short answer" as to how best describe Northern Colorado Regional Airport's Classification…. **FNL is General Aviation, Commercial Service Airport with robust Corporate Aviation operations. FNL is uniquely certificated by the FAA under Part 139 - to accommodate schedule service – and certificated under TSA's 1500 series federal regulations allowing for the screening of passengers, their carry-on items and checked baggage for all commercial airline flights**. Only DEN, COS, PUB, and FNL have this level of certification along the front range.

    Northern Colorado Regional Airport leadership strategically invested in two key certifications differentiating itself from - these operationally busier airports - Centennial, Rocky Mountain Metro, Greely, Longmont, Front Range Airport / Space Port by securing:

    a) FAA certification under Part 139 – Permits commercial flights (scheduled and/or unscheduled) by aircraft with a seating capacity of greater than 30 seats to conduct flights at FNL – including receiving flight diversions from DEN. This Certification is maintained by FNL's adherence to our approved FAA Airport Certification Manual or

ACM. The ACM outlines in detail how FNL will specifically meet the broad regulatory obligations of Part 139. This program can be summarized as: **FNL's Safety and Resiliency Programs**.

b) TSA certification under Transportation Security Regulation (TSR) 1542 permitting a scheduled passenger or public charter passenger operation with an aircraft having a passenger seating configuration of 61 or more seats. Or regardless of seats, when passengers are enplaned from or deplaned into a sterile area. Requiring an airport sponsor to have an automate badging system driven by badge recipients having an operational need for controlled access into restricted areas such the Sterile and or SIDA (Security Display Identification Area). This TSA Certification is maintained by FNL's adherence to our approved TSA Airport Security Plan or ASP. The ASP outlines in detail how FNL will specifically meet the regulatory obligations of TSRs part 1542 and applicable parts of 1544 and 1546 regulations. This program can be summarized as: **FNL's Security and Threat Mitigation Programs**.

Adherence to these safety and security programs is mandatory, perpetual, and must be absent "one offs" or local exceptions which erode the nations system regulated by the TSA and FAA.

These certifications provide unique access to markets and exponentially enhances our regional economic development opportunities resulting in enhanced long-term revenues for FNL.

Northern Colorado Regional Airport: Staff's Work Plan for 2025 – 2026

Our Vision for FNL

Become a premier corporate, general aviation, commercial service airport to help drive Northern Colorado's economy and to better serve our partner communities' regional transportation needs.

Staff's Strategic Actions in Support of the Airport Vision:

1. Enhance Airport Safety and Security for all users
2. Establish Financial Autonomy from general fund subsidies
3. Establish a Cost Recovery financial model
4. Develop and Operate FNL complimentary to attract scheduled airline service in 2027
5. Modernize FNL's Brand while leveraging and enhancing regional partnerships

Airport Commission's Calendar and the Airport Staff's Work Plan Elements

June 2025

- **Commission:** Budgets: Overview of 2025 (shortfalls) and proposed 2026 budget – Action
- **Commission:** Capital Improvement Plan 2026 – 2030. Action
- **Commission:** Airport Security Badging Parameters and Fees modernized – Action
- **Commission:** Runway 6/24 designation and on-going expense presentation - Informational
- **Commission:** FNL's temporary Air Traffic Control tower presentation - Informational
- Staff: Landing fees for non-based aircraft implemented.

July 2025

- **Commission:** Presentation from CAO on Ethics and Conflicts of Interest - Informational
- **Commission:** Parcels B & C Developments. Preferred alternatives presentation – Action
- **Commission:** City of Loveland's Annual Audit findings presentation
- **Commission:** Air Traffic Control Tower Update: CDOT Aeronautics and Raytheon Team –Informational
- Staff: Annual FAA Certification for ARFF" Live burn and Table-Top Exercise
- Staff: Re-badging of FNL's population, ~900 badges.
- Staff: Annex the remaining airport parcel into the City of Loveland boundaries
- Staff: Selection of professional forensic engineering services.

August 2025

- **Commission:** Presentation / Workshop: Air Service Development - Informational
- **Commission:** Air Traffic Control Tower Preferred "Permanent" Alternative - Action
- Staff: Airport Full Scale Exercise – Mass Casualty Event
- Staff: Recruitments conclude: Ops Tech, Admin Assist and Project Manager
- Staff: Budget supplemental approved, consultants' solicitation via RFPs begins
- Staff: Manage the FAA Safety Risk Assessment Workshop for FNL Construction
- Staff: Issue RFP for Forensic Engineer analysis for city hangars

September 2025

- **Commission:** ***No agenda item currently***
- Staff: Develop and issue RFP for Air Service Development Consultant
- Staff: Deliver ATCT Restroom Facilities – Infrastructure modifications:
- Staff: Economic Development Study: West Side Development Potential with rail
- Staff: Economic Development Analysis of development funding mechanisms
- Staff: Airshow 2025 delivered

October 2025

- **Commission*: No agenda item currently***
- Staff: Manage the FAA Safety Risk Assessment Workshop for FNL construction and ATCT
- Staff: Runway 6/24 designation change to taxiway in coordination with FAA ADO
- Staff: Conduct FAA ATCT Site selection and validate existing Solar glare analysis
- Staff: Parking Consultant 'draft report" to staff
- Staff: Consultant interviews: November/December

November 2025

- **Commission:** Parking consultant recommendation presentation – Action
- **Commission:** Professional Services multiple Contract Awards - Action
    - Financial and Market Analyses
    - Airport Use Agreements
    - Air Services Development
    - Brand and Marketing Plan for recruitment of Airlines
    - Equitable User Fees

Airport Staff's Work Plan for Calendar Year 2026

- Staff: T-Hangar leases: Update and standardize
- Staff: Re-establish Hangar Wait List with transparent process
- Staff: Recruitment of Airfield Construction Coordinator – FAA covers costs
- Staff: Air Service Development Coordination with Consultants and on site Airline meetings
- Staff: RFP for Consultant to lead Governance Transition Plan
- Staff: Rewrite TSA's ASP: Airport Security Plan
- Staff: Rewrite FAA /FNL Part 139 Airport Certification Manual - permits airline flights
- Staff: New CPI Adjustments to applicable leases.
- Staff: Airfield Construction begins in March: Primary Runway Widening – through November
- Staff: Selection of Professional services: Governance Transition Plan Development.
- Staff: Airport Budget overview of the proposed 2027 budget – Action
- Staff: Capital Improvement Plan 2027 through 2031 – Action

Governance Structure Implementation: New Airport Authority Board

B. STAFF FOLLOW-UP TO COMMISSION REQUESTS FOR ADDITIONAL INFORMATION

Runway 6/24 Overview

Historically, Northern Colorado Regional Airport has operated two runways. The primary runway designated as 15/33 and a smaller GA runway designated as 6/24 or commonly referred to as the "cross wind runway".

The primary runway meets nearly all design and safety standards for today's aircraft fleet mix utilizing FNL. The runway widening project will enhance runway 15/33 to FAA desired standards. This runway has an instrument landing system (ILS) allowing flight operations with aircraft properly equipped and with pilots who are rated for "instrument flights" to operate during low visibility weather conditions to land and take off.

The crosswind runway designated as 6/24 is used only during sunny days or visual flight conditions. This runway is used in a "unique" dual-purpose role; a runway and/or a taxiway intermittently. Aircraft entering or exiting the airport to or from the airpark use the runway as their sole access point during taxiing operations. When an aircraft taxiing from or to the airpark clears the runway which was just used as a taxiway, other aircraft can use this same pavement area as a runway to land and/or takeoff. The airpark traffic level is vibrant and complex with operations from the airport's largest flight training school to aircraft up to and including large corporate jets aircraft use this runway as a taxiway. This dual use is highly unusual and highly irregular. A hallmark of airfield safety is "uniformity and standardization" which this dual use approach conflicts with and dilutes these two foundational risk mitigation measures used on airfields to enhance aviation safety.

Additionally, runway 6/24 layout does meet any FAA design standards or basic safety buffers to mitigate risks. In fact, several significant safety "obstructions" exist within what normally would be called the runway safety area capable of causing significant damage to aircraft and serious injuries to aircraft occupants.

This "crosswind" runway is not eligible to receive FAA grants given its "overly hybrid design" which does not meet FAA design or safety standards for runways.

Today, runway 6/24 has been suspended as a runway during tower hours due to "line of site" issues from the air traffic control tower as not all runway surfaces are visible to controllers. The "line-of-site" issue is caused by the new terminal building. This restriction to exclusively a taxiway should be applied 24/7 to be consistent with mitigating risks at FNL and not just when the control tower is staffed.

Neither the Airport nor the FAA's Airport District Office staff recommend this pavement designation return to a runway for the following reasons:

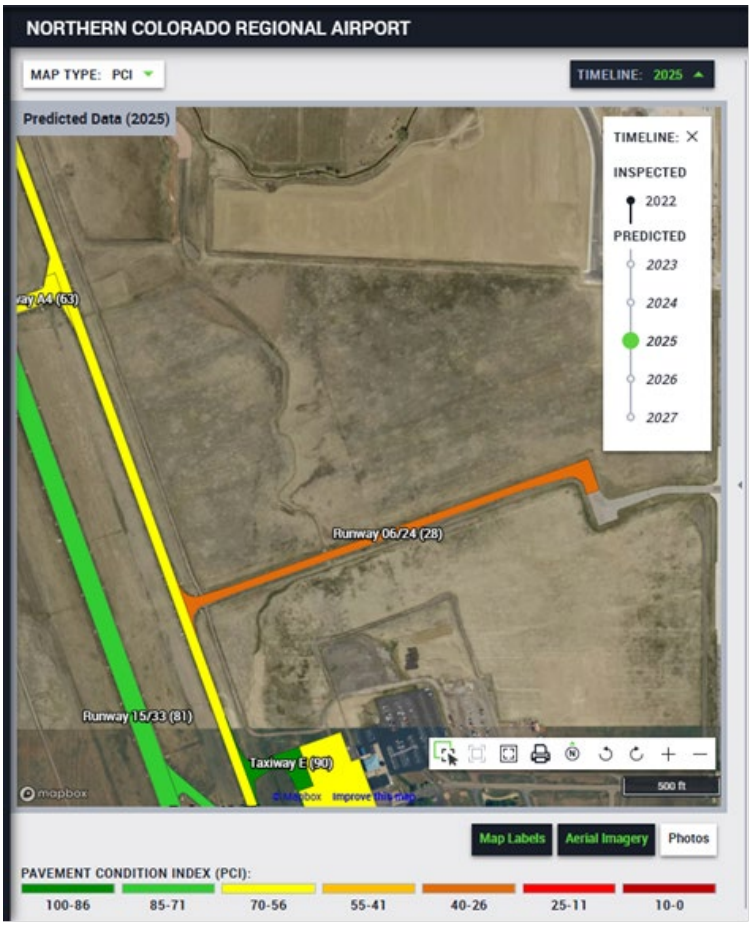
- **Airfield Safety** is reduced with staggered operations of aircraft taxiing, landings and/or takeoffs

- **The line-of-sight** issue would require relocating the existing "temporary" tower ~ at $300,000.
- **The ongoing costs** to maintain pavement have become non-sustainable and cost prohibitive.
    - FAA will not participate in maintaining, developing or improving this non-standard runway.
- **FNL's insurance carrier has concerns** continuing dual staggard operations and the risk level.
- L**imited airport finances** should steer the organizational focus to a parallel runway and taxiway on the West side leveraging FAA and CDOT grants.

Airport staff recommends not continuing to use this pavement for alternating and/or intermittently aircraft operations between landings and takeoffs and taxiing aircraft into and out of the airport. Staff believe this runway 6/24 should be reclassified permanently as a taxiway.

Unless directed by the Airport Commission, airport staff will follow their current work plan and coordinate with the FAA's Airports District Office to deliver this reclassification to a taxiway. Please note: In the event of an emergency, any surface at FNL - paved or unpaved - is available to a pilot for landing at their discretion.

FNL Runway 6-24 Pavement Maintenance Plan		
Year	**Recommendation**	**Cost**
2025	Reconstruction	$2.6M
2030	Crack Seal & Seal Coat	$650k
2035	Crack Seal & Seal Coat	$775K
2040	Mill and Overlay	$3.1M
2045	Crack Seal & Seal Coat	$1.1M



Air Traffic Control Tower Overview/Update

Temporary Air Traffic Control Tower

Airport Stakeholders continue to discuss a desire to replace the existing “temporary” FAA Contract Control Tower (ATCT) facility. The primary example being circulated is a tower constructed of stacked sea land containers four stories in elevation which is considerably higher than FNL’s temporary tower of today. Such a new facility would require a new location and substantial cost in addition to a new structure required to be ADA compliant. The estimated cost would likely exceed $350,000 with environmental clearing, conducting a new site selection study by the FAA, parcel infrastructure cost, relocating the existing tower, new tower facilities and relocation of equipment and certification by the FAA.

Duplicating our existing “temporary” tower would not address the airport’s primary concern of the return of radar to FNL. “Our continuous ask” of the FAA is the return of radar. Duplicating existing facilities provides an advantage or gain in our desired outcome for an ATCT facility that would come with radar. What would be accomplished is inducing additional cost absent enhanced benefits.

Airport Staff ‘s Workplan for 2025 or 2026 does not include any actions, effort or analysis of a new “temporary tower”.

Permanent Air Traffic Control Tower

Northern Colorado's Regional Airport staff continues a two-path approach - at the direction of the Airport Commission – for a permanent solution to secure an Air Traffic Control Tower facility.

1) **Digital tower program**
   FNL continues to partner with the State's Aeronautics Division as the new "virtual tower" vendor works through a complex certification process. The FAA certification appears to be on track for completion in the first quarter of 2026. Funding remains at this writing as 100% local.
   The State's Aeronautics Planning Director and the Virtual tower vendor Raytheon representatives will provide an update to the Commission at their July meeting regarding the cost of participation and the certification process by the FAA for virtual towers.

2) **Traditional tower program -** Attachment #4
   Simultaneous to the existing and operational "temporary air traffic control tower", the FAA's ATCT Site Selection team has begun their local analysis of three potential permanent tower sites on the East side of the primary runway. The cost of this required "Air Traffic Control Tower Site Selection Study" is approximately $110,000 and was budgeted for in the 2024/2025 cycle. This effort is a few months ahead of schedule.

   In the meantime, airport staff will continue to work with our Congressional Delegation seeking "community funding" specifically identified for a permanent air traffic control program funded with FAA grants.

Staff anticipate presenting the FAA funding options for remote towers at the August or September Commission meeting allowing a recommendation directing staff as to which option to fully pursue going forward.

ATTACHMENTS

1. 2025 Airshow Map
2. CDOT Digital Tower Report
3. FAA Airport Categories
4. FAA VISTA Preliminary Sites Map

Attachment #1

THE GREAT COLORADO AIR SHOW

Northern Colorado Regional Airport

September 20 & 21, 2025

Local Road Closure

Boyd Lake Ave

Substation

11,745'

Category I Aerobatic Box

105° 0' 2.233" W
40° 25' 44.37" N

105° 1' 42.42" W
40° 27' 44.31" N

105° 1' 55.76" W
40° 27' 77.24" N

Storage Facility

Perimeter Fence

Northern Colorado Law Enforcement Training Center

AARF/LFRA Engine 474

9,625'

Perimeter Fence

Full Road Closure

Dairy

Railroad

Show Center

105° 0' 31.92" W
40° 26' 25.35" N

Bomb Burst Point

105° 0' 30.98" W
40° 26' 27.71" N

Category I Showline

Artificial Showline

Artificial Showline

5,000'

Category I Showline

Category I Aerobatic Box for Fire Bombs and Category III for Civilians

2,700'

AARF/LFRA Tender 46

1,200'

1,100'

1,000'

900'

800'

Category III Showline

Category III Showline

Category III Showline

33

15

105° 0' 0.18" W
40° 26' 0.983" N

105° 0.5135' W
40° 26.5189' N

105° 0.566' W
40° 26.4861' N

105° 0.3541' W
40° 26.3532' N

105° 0.3333' W
40° 26.3443' N

105° 0.8758' W
40° 27.5923' N

105° 1.223' W
40° 27.2214' N

A1

A2

A3

A4

A5

Skydiver Landing Area

A

A

Category I Aerobatic Box

Category I Aerobatic Box

ARFF/LFRA AR44

AARF/LFRA AR53

Crowd Edge Marker
700 feet from crowd edge

Crowd Line

Crowd Line

Spectator Area

AARF/LFRA Engine 505

Control Point

Air Boss

105° 0' 52.46" W
40° 26' 9.758" N

Friends Family

Thunderbirds Parking

Crowd Edge Marker
700 feet from crowd edge

Mountain Ave

Medical Helicopter Landing Zone

Static Displays

Thunderbird Briefing Room

Terminal

Safety Brief Room

Incident Command Post

EMS

Entrance Exit

Civilian Performers Parking

Concession Compound

Gunnison

Stearman

Bonanza Dr

Beechcraft

Staggerwing

Cessna Dr

Lear Dr

Entrance Exit

Airport Administration Fire Station #4

ADA Parking

VIP Parking

General Parking

Humane Society

Storage Facility

E County Rd 9E

Concorde Blvd

Discovery Air

VA Clinic

Perimeter Fence

Overflow Parking

Lindbergh Dr

Byrd Dr

Ezekiel Rd

Thunderbird Weather/Maintenance Hangar

Perimeter Fence

Blackhawk Rd

Rockwell Ave

Blue Angels

24

6

L

Creation Date 5/16/2025

0 1,000 2,000 Feet

Attachment #2

WEP&A
First in Engineering Excellence

May 31, 2025

From: William E. Payne, P.E.
To: Colorado Division of Aeronautics

Section A – Digital Air Traffic Control Contract Progress Report #47

Re: Period: May 1 through May 31, 2025

Colorado Digital Tower Project
Activity Status

Activity	Status/Start Date (Projected)	Finish Date (Projected)	Remarks
Digital Tower Implementation			
Digital Tower System			
FNL Non-Binding Letter of Intent to RTX/Frequentis	1/18/2024	2/2/2024	Complete
RTX/Frequentis Letter of Intent to FNL	2/15/2024	2/15/2024	Complete
RTX/Frequentis Digital Tower Proposal	4/18/2024	4/18/2024	Being Reviewed
Response Letter to RTX/Frequentis Proposal	5/1/2024	5/1/2024	Complete
Digital Tower Testing			
RTX/Frequentis Batch 0 Testing	2/10/2025	2/20/2025	Complete
RTX/Frequentis Batch 1 Testing	4/2/2025	4/11/2025	Complete
RTX/Frequentis Batch 2 Testing	5/12/2025	5/23/2025	Complete (arrival tests in Batch 3)
RTX/Frequentis Batch 3 Testing	5/5/2025	TBD	
RTX/Frequentis Batch 4 Testing	TBD	TBD	
RTX/Frequentis Batch 5 Testing	TBD	TBD	
RTX/Frequentis Batch 6 Testing	TBD	TBD	
RTX/Frequentis Completes System Design Approval	TBD	TBD	
RTX/Frequentis to FNL	TBD	TBD	
FAA Testing at FNL	TBD	TBD	
Digital Tower Recieves Op Viability Decision	TBD	TBD	
Digital Tower System and ATCT Commissioned	TBD	TBD	
Functional Acceptance Decision	TBD	TBD	

Digital Tower Project Narrative:

The FAA is showing some real interest in moving the digital tower system certification process forward. This can be attributed to the new Administration's stated goal to build a new air traffic system by modernizing the National Airspace System (NAS) in the wake of the events of the past few months. The major component of the plan presented by the Secretary of Transportation is to increase the safety and efficiency of the air traffic system by providing air traffic controllers with technologies to aid them in their primary task of keeping the NAS safe.

During a meeting with the Technical Operations management at the FAA's Technical Center regarding our digital tower concept to several Colorado airports, they were supportive of the idea. There were two concerns enumerated; 1) each airport would have to have its own staff of dedicated controllers and 2) data from each airport to the digital tower center would be transmitted over a secure fiber network. It has always been expected that each airport would have its own cadre of controllers. Initial discussions with the Federal Telecommunications Infrastructure (FTI) contractor indicates that they are prepared to provide service to the digital tower center for each airport depending on bandwidth requirements.

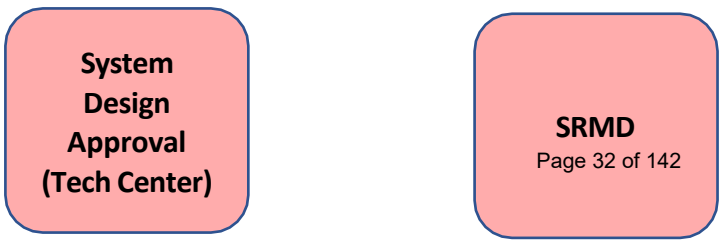
The other question we are anticipating from FAA's Program Management Office (PMO) deals with the increase in cost to the Federal Contract Tower (FCT) Program of potentially eight non-towered airports entering the program. To be prepared for the question, we are developing a staffing plan and cost to compare with the cost of building eight separate airport traffic control towers.

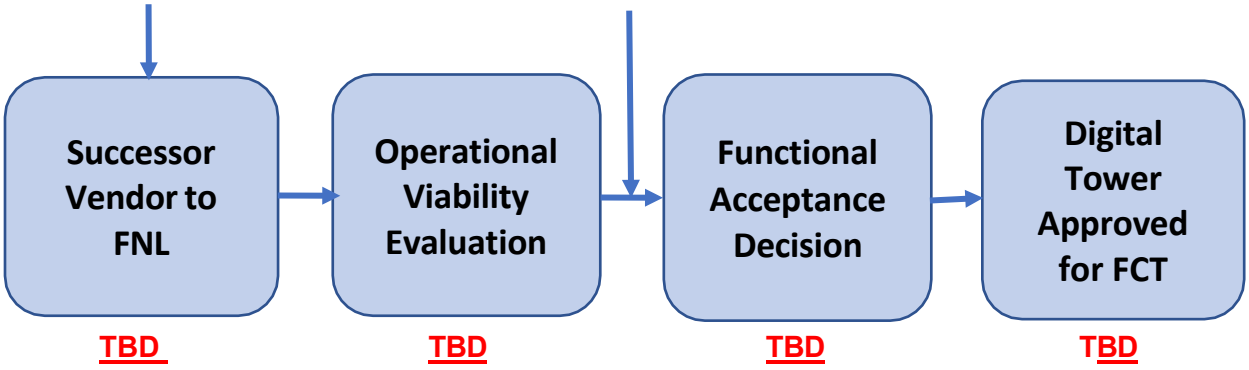
Recently there has been a bevy of webinars and articles dealing with remote/digital towers. Two articles written by Marc Scribner and Ginger Evans of the Reason Foundation, and Gary Leff of View from the Wing are attached. These articles do not paint the FAA in a good light.

FTX/Frequentis continues to move forward tower System Design Approval. They have recently completed Batch 1 and Batch 2 testing. However, the weather at the Tech Center prevented the completion of some approach tests in Batch 2. These tests will be done during Batch 3 testing according to the NextGen Program Office. This demonstrates NextGen's willingness to compress the testing schedule to move the project forward. This is a complete turnaround from how they addressed our remote/digital tower project at the Northern Colorado Regional Airport (FNL) and the one at the Leesburg Executive Airport (JYO) in Leesburg, Virginia. On the documentation front, Frequentis has completed more of the required documents and presented them to the FAA. One important piece is the System Security Plan which has been accepted by the FAA.

Frequentis is installing a digital tower system at the Bartow Executive Airport in Bartow, Florida. The system will be used at a nearby college as a training tool for controllers. This project is being installed outside of the FAA SDA process.

Proposed Digital Tower Process Moving Forward:





Schedule Note: This status is based on the latest proposed schedule and is dependent upon System Design Approval at the Tech Center.

DIGITAL TOWER PROJECT PROGRAM MANAGEMENT

Program Description/Background

The Program Manager for this project, William E. Payne, will serve as a technical subject matter expert to represent the Division's investment and interest in the Remote Tower and facilitate the project's forward progress to FAA certification and deployment. The Program Manager will participate in and assist with the development of all evaluation, testing, and certification activities, as well as attend all project meetings, and will serve as the technical representative for the Division of Aeronautics during all phases of the project as enumerated below.

Tasks:

1. **Provide Technical Representation and Oversight of the Project**

   Effort this Period: Completed.

2. **Participate in Development of the FAA's Operational Safety Assessment (OSA) Basis for Evaluation of Non-Federal Remote Tower Equipment**

   Effort this Period: The OSA is still in draft form and is continuing to be developed as the project proceeds toward System Design Approval.

3. **Participate in Development of the Operational Visual Requirements (OVR)**

Effort this Period: The OVR Version 2.1 has been issued.

4. **Participate in Development of the Requirements/Specifications for Non-Federal Tower Equipment**

   Effort this Period: Participated in the FAA TechOps review and commented on the Remote Tower Requirements Document and prepared comments on OVR 2.1. Completed.

5. **Assist with Development of System Configuration**

   Effort this Period: The system configuration will be modified based on lessons learned 4K cameras and displays for demonstration on March 27, 2023.

6. **Modify System Configuration Based on Testing Phase Comments**

   Effort this Period: Completed by Searidge.

7. **Run Periodic Tests of the Remote Air Traffic Control Tower System During Periods of Evaluation/Testing Inactivity**

   Effort this Period: Complete.

8. **Attend System FAA Technical Interchange Meetings (TIM)**

   Effort this Period: Provided SME representation in the recent FAA discussion of OVR 2.1. Completed.

9. **Participate in FAA Configuration Review Board (CRB) Activities**

   Effort this Period: NextGen has yet to establish the CRB. This effort may be rolled into development of the Remote Tower AC.

10. **Evaluate an Air Situation Display in Preparation for Testing Against Standard Terminal Automation Replacement System Radar Equipment (STARS).**

    Effort this Period: Complete.

11. **Collaborate with FAA on Alternate Phase 1 Virtual/Remote Testing**

    Effort this Period: Complete

12. **Work with FAA to develop and Implement Phase 1 Passive Remote Tower Testing**

    Effort this Period: Complete

13. Work with FAA to Develop and Implement Phase 2 Active Remote Tower Testing

Effort this Period: There has been no activity on this task this period.

14. Work with FAA and FNL on Phase 3 Industry-Led Initial Operational Capability (IOC)

Effort this Period: This task has been renamed Validation & Verification (V&V.) There has been no activity on this task this period. Phase 3 Active Remote Tower Testing will begin after Phase 2 Active Remote Tower testing is complete and the SRMD has been signed.

15. Work with FAA on Phase 4 Remote Tower System Certification and Commissioning

Effort this Period: There has been no activity on this task this period. Phase 4 System Design Approval and Commissioning will begin after the conclusion of Phase 3 V&V and the SRMD has been signed.

16. Participate in Development of the FAA's Advisory Circular (AC) for Remote Tower Systems for Non-Federal Applications

Effort this Period: Continue participation in the FAA TechOps TIM to review and comment on the Remote Tower Advisory Circular.

17. Provision of Regular Written Reports, Presentations and Updates on the Project's Progress to Internal and External Stakeholders

Effort this Period: Preparation of the monthly Program status report.

18. Travel as Needed (In-State and Out of State) for Meetings with FAA, Airport and Division Personnel

Effort this Period: Travel to FNL for meetings with Airport Board and the Cities of Fort Collins and Loveland.

DEVELOPMENT OF POTENTIAL ENHANCED SITUATIONAL AWARENESS TOOLS FOR NON-TOWERED AIRPORTS

Tasks:

1. **Explore the Potential Development of a System Consisting of Existing and New Surveillance Sources that can be Deployed, Owned and Operated by Non-Towered Airports to Provide Airport Staff with Improved Visibility into the Local Airspace and on the Airport Surface, with the Ultimate Goal of Improving Aviation Safety and System Efficiency.**

   Effort this Period: No activity this period.

2. **Prepare System Requirements to be Used by Airports and/or the Division when Seeking Vendor Proposals to Implement a Situational Awareness System.**

   Effort this Period: No activity this period.

Glossary of Project Technical Acronyms

ADS-B	Automatic Dependent Surveillance – Broadcast
AGL	Above Ground Level
ARTCC	Air Route Traffic Control Center
ASDE-X	Airport Surface Detection Equipment – Model X
ASOS	Automatic Surface Observation System
ASR-9	Airport Surveillance Radar – Model 9
AWOS	Automatic Weather Observation System
ATC	Air Traffic Control
ATIS	Automatic Terminal Information System
AJT	Air Traffic Services
AJI	Safety Technical Training Services
AJV	Mission Support Policies and Procedures
CTAF	Common Traffic Advisory Frequency
ERAM	En Route Automation Modernization
FAA	Federal Aviation Administration
FAT	Factory Acceptance Test (alternately - First Article Test)
FDIO	Flight Data Input/Output
FTI	Federal Communications Infrastructure (Harris Corp.)
GA	General Aviation
HITL	Human In the Loop
HMI	Human Machine Interface
ILS	Instrument Landing System
IOC	Initial Operating Capability
IMC	Instrument Meteorological Condition
LOA	Letter of Agreement
MLAT	Multilateration
MSL	Mean Sea Level (above)
NAS	National Air Space
NATCA	National Air Traffic Controllers Association
NESG	NAS Enterprise Security Gateway
NextGen	Next Generation Air Transportation System
NORDO	No Radio
OSA	Operational Safety Assessment
OTW	Out of the Window
OVD	Operational Viability Decision
RSA	Runway Safety Area
SAT	Site Acceptance Test
SDA	System Design Approval
SMR	Surface Movement Radar
SMS	Safety Management System
SRA	Safety Risk Assessment
SRMD	Safety Risk Management Document
SRMDM	Safety Risk Management Document Memorandum
SRMP	Safety Risk Management Panel
SHA	System Hazard Analysis
SSHA	Sub-System Hazard Analysis
STARS	Standard Terminal Automation Replacement System
SWIM	System Wide Information Management
TAMR	Terminal Automation Modernization and Replacement
TRACON	Terminal Radar Control Facility
UHF	Ultra High Frequency
VFR	Visual Flight Rules
VHF	Very High Frequency
VMC	Visual Meteorological Condition

ATTACHMENTS

1. FNL Draft Graphic Remote Tower Timeline as of May 31, 2025.
2. “Advancing Remote Tower Deployment…” article
3. “FAA Blocking Remote Tower…” article

Colorado Digital Tower Timeline
(Draft)

RTX/Frequentis Begin SDA Testing at Tech Center February 2025

Controller Training Complete

Batch 0 Testing Complete

Batch 1 Testing Complete

Batch 2 Testing Complete

Batch 3 Testing 6/5/25

Batch Testing – 6 Tests

RTX/Frequentis receives Preliminary SDA approval December 2025-

2025

220° Camera Array

360° Camera Array

220° Camera Array

Upcoming activity

Complete

Critical Path Task

Abbreviation Key

FCT – Federal Contract Tower Program
SAT – Site Acceptance Test
SRMP - Safety Risk Management Panel
SRMD – Safety Risk Management Document
STARS – Standard Terminal Automation Replacement System
SDA – System Design Approval

MOU – Memorandum of Understanding
Ops – Operations
TBD – To Be Determined
OVD – Operational Viability Decision
ORI - Operational Readiness Inspection (Mobile ATCT)
V&V – Validation & Verification

reason FOUNDATION

ADVANCING REMOTE TOWER DEPLOYMENT IN THE UNITED STATES

By Ginger Evans and Marc Scribner

May 2025

Reason Foundation's mission is to advance a free society by developing, applying, and promoting libertarian principles, including individual liberty, free markets, and the rule of law. We use journalism and public policy research to influence the frameworks and actions of policymakers, journalists, and opinion leaders.

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TABLE OF CONTENTS

PART 1

INTRODUCTION

Remote air traffic control towers, sometimes referred to as virtual towers or digital towers, are being deployed in increasing numbers around the world. Rather than building a tall concrete structure with a control cab on top to house the controllers for visual views of aircraft movements, a steel tower (or several towers) is mounted with an array of video cameras and communications equipment.[1] Those cameras and sensors feed information securely to controllers in a ground-level building housing the control room, often in a location remote from the airfield. Instead of the traditional out-the-window view, controllers have panoramic video displays of the airfield and its environs, including identifying individual aircraft with tags displayed on-screen. This allows them to continuously monitor traffic without turning their head or standing, which is critical for safe and efficient air traffic management.

Remote towers provide the ability to serve low-activity airports from locations where controllers live or desire to live, rather than requiring staff relocations. Management of multiple remote towers can be conducted from a single facility known as a remote tower center. Regardless of how these technologies are deployed, traffic procedures are unchanged from those used in traditional tower operations. While controllers working in a remote tower center can be certified to handle traffic at multiple airports, they only control traffic at one airport at a time. This allows for control of a particular airport to be easily

[1] Stephen D. Van Beek, "Remote Towers: A Better Future for America's Small Airports," Policy Brief No. 143, Reason Foundation, July 2017. https://reason.org/wp-content/uploads/2017/07/air_traffic_control_remote_towers-1.pdf (15 Apr. 2025).

transferred to a second controller as the need arises. As a result, remote tower technology has the potential to maximize utilization of the limited national pool of certified controllers.

> *… remote tower technology has the potential to maximize utilization of the limited national pool of certified controllers.*

The United States is not alone in facing difficulties in attracting and retaining staff to operate control towers, especially those located far from population centers. But many air navigation service providers have begun adopting remote towers, and they have found that the digital working environments supporting multiple airports are attractive to younger prospective recruits.[2] And by increasing controller situational awareness, this technology also reduces workload and stress, helping to retain these highly trained and specialized employees.

Significant cost savings can also be realized. Construction costs for remote towers are a fraction of those for conventional brick-and-mortar towers. When several low-activity airports are controlled from a single remote tower center, air navigation service providers can realize significant staff and operating cost savings. Importantly, this does not reduce the demand for controllers nationwide, but it does mean that existing and new controllers can be employed more productively.

New airspace entrants, such as electric vertical takeoff-and-landing (eVTOL) aircraft operating advanced air mobility (AAM) services, already plan to make use of remote/digital tower technology for vertiport infrastructure. The AAM service model is expected to leverage smaller airports, so implementing remote towers at those airports can support development of technology and procedures for more robust utilization of this proven technology.

[2] "Saab r-TWR™ Handbook: Your Airport, Our Solutions," Saab, 2023. 7. https://www.saab.com/globalassets/products/ips/saab-digital-air-traffic-solutions/r-twr-handbook-2023.pdf (15 Apr. 2025).

The challenge in the United States is that the Federal Aviation Administration (FAA) in recent years has been unenthusiastic and inconsistent about remote/digital tower technology. Congress has attempted to spur the agency to act, although progress to date has been minimal. This brief makes the case for embracing remote/digital towers in the United States. Part 2 discusses FAA's original research into remote tower technology. Part 3 surveys the global success of remote/digital towers. Part 4 discusses remote tower development in the United States. And Part 5 concludes with recommendations for policymakers.

PART 2

ORIGINAL FAA RESEARCH INTO REMOTE TOWERS

Two decades ago, FAA developed the initial concept of remote/digital tower, in what it called a "staffed virtual tower" (SVT). Analysis of simulations by FAA at its Atlantic City Technical Center was published in the winter 2008 issue of the *Journal of Air Traffic Control*.[3] This initial study demonstrated that an SVT could provide better surveillance at all hours, but especially at night and in low-visibility conditions necessitating instrument flight rules (IFR) (rain, fog, low cloud ceiling, or snow conditions) thanks to use of radar and high-resolution display screens already in wide usage in control towers.

One important finding was that radio communications during "out-the-window" (OTW) simulations of IFR conditions were significantly higher than in the SVT simulations, since in OTW, controllers must rely solely on pilot reports for aircraft location. With SVT technology, controllers can "see" the aircraft position on the display screen. The study also measured increased controller workload for the traditional OTW work environment versus the simulated SVT environment.

After using both alternatives, experienced controllers who participated in the test preferred the SVT displays to conventional OTW operations. The report concluded that the SVT has

[3] Daniel Hannon, et al., "Feasibility Evaluation of a Staffed Virtual Tower," *Journal of Air Traffic Control*, Vol. 50, No. 1, Winter 2008.

"clear advantages" in night conditions. While most of the discussion in the United States about remote towers focuses on applications at smaller airports, this study was conducted based on Tampa International Airport, showing promising use cases for larger, higher-volume airports.

In 2013, the Human Factors Branch of FAA's Technical Center released a study on "Staffed NextGen Towers" (SNTs) in which controllers would shift from relying primarily on OTW views to camera and surveillance display screens.[4] It concluded that "controllers can perform their jobs effectively in both Supplemental and Contingency SNT environments."[5] Following the tests, which simulated the Dallas-Fort Worth airspace and airport, "controllers felt the cameras were less critical or important in the Supplemental condition, [but] the controllers rated the camera to be essential in both conditions. They also believed that the SNT concept would be beneficial for the [National Airspace System] and for control tower operations."[6]

FAA is currently conducting a study of digital tower operations at its Atlantic City Technical Center utilizing technology provided by a partnership of RTX (formerly Raytheon) and Frequentis, an Austrian air traffic technology developer. This project is discussed in more detail in Part 4.

4 Ferne Friedman-Berg and Nicole Racine, "Staffed NextGen Tower Human-in-the-Loop 2 (SNT HITL 2): Camera Integration Evaluation," Federal Aviation Administration, DOT/FAA/TC-13/41, Apr. 2013.

5 Ibid. 64.

6 Ibid.

PART 3

THE GLOBAL SUCCESS OF REMOTE TOWERS

3.1 FROM NOVELTY TO MAINSTREAM

Remote/digital tower technology is in wide use in Europe and is rapidly expanding to Asia, Canada, and the Middle East. Air navigation service providers (ANSPs) in Germany, Norway, and Sweden are now controlling multiple small airports from a single remote tower center (RTC). RTCs are facilities where multiple airports' airfield operations are managed from one building. Controllers obtain certifications for multiple airports but only work one airport at a time. Remote towers monitoring a single airport are also on the rise. For larger airports, these can be helpful where there is insufficient space to build a new control tower while ensuring full visibility of multiple or long taxiway/runway systems.

Sweden was the first adopter of this technology. As a result, it has the most RTCs and until recently the most remote towers (until being surpassed by Norway) in operation of any country. The first remote tower system to receive regulatory approval was the Saab r-TWR.[7] Sweden has two RTCs in operation that collectively control eight airports, with additional airport additions planned.[8] The number of airports managed from a single RTC will grow over time as towers age and need rehabilitation or replacement. Saab's RTCs are

7 "Saab r-TWR™ Handbook: Your Airport, Our Solutions," Saab. 10.

8 Email to Ginger Evans from Saab Group, 21 Apr. 2025.

dimensioned to support up to 24 airports of different sizes. For instance, the Saab RTC installations in Belgium and the Netherlands will manage between six and 10 airports each.[9]

> *Remote/digital tower technology is in wide use in Europe and is rapidly expanding to Asia, Canada, and the Middle East.*

Globally, remote/digital towers are no longer considered new technology and are increasingly mainstream. The Saab installation in Sweden has had over 14,000 international visitors. On April 4, 2023, members of the U.S. House Committee on Transportation and Infrastructure received a tour and briefing. The delegation included Chairman Sam Graves, Ranking Member Rick Larsen, and six other members.[10]

Outside of Europe, Singapore is issuing a tender for an Intelligent Digital Tower solution (combining advanced surface movement guidance and control system and digital tower). This will be the first in the world to implement a complete digital solution for a large, complex airport.[11]

The major expansion of Dubai's Al Maktoum International Airport is set to incorporate a digital tower solution, rather than a traditional tower, for the planned second control tower in the center of the airfield.[12] In June 2024, Kongsberg Geospatial announced an agreement to provide "digital tower solutions" to Nav Canada, the world's second largest (by traffic) ANSP.[13] The initial facility will be installed to serve Kingston Airport, which will be designed to potentially serve as an RTC to manage additional airports in the future. In

9 Ibid.

10 Telephone call between Ginger Evans, Dr. Phil Smith, and Saab CEO, 27 Aug. 2024. "Expenditure Reports Concerning Official Foreign Travel," U.S. House of Representatives, 12 Oct. 2023. https://disclosures-clerk.house.gov/foreign-reports/2023q4oct12.pdf (21 Apr. 2025).

11 Email to Ginger Evans from Saab Group, 16 Feb. 2025.

12 Ibid.

13 Press Release, "NAV CANADA selects Kongsberg Geospatial as the technology partner to equip Digital Aerodrome Air Traffic Services (DAATS) program," Kongsberg Geospatial, 24 June 2024. https://www.kongsberggeospatial.com/news/nav-canada-selects-kongsberg-geospatial-as-the-technology-partner-to-equip-digital-aerodrome-air-traffic-services-daats-program (15 Apr. 2025).

2025, Thailand plans to begin implementing digital tower solutions across the country's airports.[14]

> *The growing popularity of remote towers around the world is borne out in international surveys.*

The growing popularity of remote towers around the world is borne out in international surveys. According to a database maintained by the International Federation of Air Traffic Controllers' Associations (IFATCA), there were 41 remote towers in operation, under development, or in active planning around the world; 10 remote tower centers; four contingency towers, which are designed to be used when the main tower is out of service for any reason; and five remote tower research sites.[15] While incomplete, IFATCA's database shows the broad interest and success of remote/digital tower technology around the world. Table 1 displays the remote/digital tower projects listed in the IFATCA database by type and country.

TABLE 1: GLOBAL REMOTE/DIGITAL TOWER PROJECTS, BY TYPE AND COUNTRY

Country	Remote Tower	Remote Tower Center	Contingency Tower	Remote Tower Research Site
Australia			1	
Belgium	2			
Canada	1			1
Denmark		1		
Estonia		1		
Finland	7	1		
Germany	3	2		
Hungary			1	
Iceland	1			
Italy	1			

[14] "Thailand unveils $106M investment in aviation technology," VNExpress International, 4 Mar. 2025. https://e.vnexpress.net/news/news/traffic/thailand-unveils-106m-investment-in-aviation-technology-4856897.html (15 Apr. 2025).

[15] "Remote Towers – Interactive Map," International Federation of Air Traffic Controllers' Associations, 12 Sept. 2023. https://ifatca.org/remote-towers-interactive-map/ (15 Apr. 2025).

Country	Remote Tower	Remote Tower Center	Contingency Tower	Remote Tower Research Site
Japan				1
Netherlands	2			
Norway	14	1		
Romania	1	1		
Singapore			1	
Sweden	8	2		
United Kingdom	1	1	1	1
United States				2
Global	**41**	**10**	**4**	**5**

Source: "Remote Towers – Interactive Map," International Federation of Air Traffic Controllers' Associations, 12 Sept. 2023.

3.2 STAFF AND COST EFFICIENCIES

Saab reports that staffing efficiency was improved by 30% after adoption of centralized operations within remote tower centers (RTCs).[16] These efficiencies can be realized through several pathways. First, RTCs need only one manager per shift, instead of one for each airport. Second, controller coverage can be optimized to avoid disruptions caused by relief time, sick leave, and other variables that influence controller availability. Third, training is conducted on simulators collocated at the RTCs, so controllers do not need to travel for training. Finally, for night operations, when a minimum of two controllers is required (including by FAA), the centralized facility makes it easier to ensure the necessary controller redundancy is achieved.

With respect to capital costs, the cost range for the technology itself is $3 million to $4 million.[17] Once the approval process is streamlined, it is believed these costs can be reduced. Structure or facility costs are in addition to the technology procurement, although these are minimal compared to conventional towers. In some cases, existing facilities can be retrofitted for digital tower operations by adding fiber and communications connectivity.

Total capital costs to deploy a remote tower can be expected to be a fraction of the capital costs experienced by the FAA Contract Tower Program (FCT) in recent years. For instance, in

16 Telephone call between Ginger Evans, Dr. Phil Smith, and Saab CEO, 27 Aug. 2024.

17 Ibid.

FY 2024, FAA awarded Orlando Kissimmee Gateway Airport $1 million to fund the design of a 115-foot FCT replacement tower that is estimated to cost $17 million.[18]

> *Total capital costs to deploy a remote tower can be expected to be a fraction of the capital costs experienced by the FAA Contract Tower Program (FCT) in recent years.*

In the United States, conventional towers operated by FAA can cost between $30 million and $100 million to build, depending on the location, height, and instrumentation. For example, the new 157-foot tower at Teterboro Airport in New Jersey dedicated in 2024 cost $73.4 million.[19] For comparison, the new 370-foot tower at Charlotte Douglas International dedicated in 2022 cost $94 million.[20]

3.3 REMOTE TOWERS IN OPERATION

In 2021, London City Airport became the first major airport to be served by a remote tower.[21] The control facility is located at Swanwick, about 80 miles away.[22] While most airports served by a remote tower are small, interest is growing among larger airports. Table 2 lists remote towers known to be in current operation, which is based on the IFATCA database, a similar database from Think Research,[23] and the authors' analysis.

18 "Kissimmee Gateway Airport Air Traffic Control Tower," Permitting Dashboard, General Services Administration. https://www.permits.performance.gov/permitting-project/dot-projects/kissimmee-gateway-airport-air-traffic-control-tower (21 Apr. 2025).

19 Press Release, "FAA Commissions New Air Traffic Control Tower at Teterboro Airport," Federal Aviation Administration, 20 Jan. 2025. https://www.faa.gov/newsroom/faa-commissions-new-air-traffic-control-tower-teterboro-airport (21 Apr. 2025).

20 Press Release, "FAA Commissions New Air Traffic Control Tower at Charlotte Douglas International Airport," Federal Aviation Administration, 5 Apr. 2022. https://www.faa.gov/newsroom/faa-commissions-new-air-traffic-control-tower-charlotte-douglas-international-airport (21 Apr. 2025).

21 Press Release, "London City is first major airport controlled by remote digital tower," NATS, 30 Apr. 2021. https://www.nats.aero/news/london-city-is-first-major-airport-controlled-by-remote-digital-tower/ (15 Apr. 2025).

22 Ibid.

23 "Remote and Digital Tower Operations," Think Research, 2024. https://think.aero/insights/resources/remote-and-digital-tower-operations/ (15 Apr. 2025).

TABLE 2: REMOTE TOWERS IN CIVIL AVIATION OPERATION

Country	Location	ICAO Code	Year Operational
Germany	Erfurt–Weimar Airport	EDDE	2022
Germany	Saarbrücken Airport	EDDR	2018
Estonia	Kuressaare Airport	EEKE	2024
Estonia	Tartu Airport	EETU	2023
Italy	Brindisi Airport	LIBR	2022
Norway	Berlevåg Airport	ENBV	2020
Norway	Førde Airport	ENBL	2023
Norway	Hasvik Airport	ENHK	2020
Norway	Leknes Airport	ENLK	2025
Norway	Mehamn Airport	ENMH	2022
Norway	Molde Airport	ENML	2025
Norway	Namsos Airport	ENNM	2022
Norway	Røros Airport	ENRO	2022
Norway	Rørvik Airport	ENRM	2022
Norway	Røst Airport	ENRS	2019
Norway	Sandnessjøen Airport	ENST	2025
Norway	Sogndal Airport	ENSG	2023
Norway	Svolvær Airport	ENSH	2023
Norway	Vardø Airport	ENSS	2020
Romania	Brașov-Ghimbav International Airport	LRBV	2023
Sweden	Åre Östersund Airport	ESNZ	2021
Sweden	Kiruna Airport	ESNQ	2021
Sweden	Linköping/Saab Airport	ESSL	2019
Sweden	Malmö Airport	ESMS	2024
Sweden	Örnsköldsvik Airport	ESNO	2015
Sweden	Scandinavian Mountains Airport	ESKS	2019
Sweden	Sundsvall-Timrå Airport	ESNN	2017
Sweden	Umeå Airport	ESNU	2023
United Kingdom	Cranfield Airport	EGTC	2018
United Kingdom	London City Airport	EGLC	2021

Source: "Remote Towers – Interactive Map," International Federation of Air Traffic Controllers' Associations, 12 Sept. 2023; "Remote and Digital Tower Operations," Think Research, 2024; authors' analysis.

Belgium, Denmark, and Norway have aggressive deployment plans to expand remote towers throughout their respective countries. Other countries throughout the world are conducting feasibility studies.

3.4 REMOTE TOWER CENTERS IN OPERATION

The efficiency benefits of remote/digital towers are fully realized under the remote tower center (RTC) model, whereby a single RTC manages air traffic at multiple airports. Unsurprisingly, the early adopters of remote/digital tower technology in northern Europe are leading the development of RTCs. Table 3 lists remote tower centers known to be in current operation, which is based on the IFATCA and Think Research databases, and the authors' analysis.

TABLE 3: REMOTE TOWER CENTERS IN CIVIL AVIATION OPERATION

Country	Remote Tower Center	Airports Controlled (ICAO Code)	Year Operational
Germany	Leipzig	Erfurt–Weimar (EDDE), Saarbrücken (EDDR)	2018
Norway	Bodø	Berlevåg (ENBV), Førde (ENBL), Hasvik (ENHK), Leknes (ENLK), Mehamn (ENMH), Molde (ENML), Namsos (ENNM), Røros (ENRO), Rørvik (ENRM), Røst (ENRS), Sandnessjøen (ENST), Sogndal (ENSG), Svolvær (ENSH), Vardø (ENSS)	2022
Romania	Arad	Braşov-Ghimbav (LRBV)	2023
Sweden	Stockholm	Åre Östersund (ESNZ), Kiruna (ESNQ), Malmö (ESMS), Umeå (ESNU)	2021
Sweden	Sundsvall	Linköping/Saab (ESSL), Örnsköldsvik (ESNO), Scandinavian Mountains (ESKS), Sundsvall–Timrå (ESNN)	2015
United Kingdom	Swanwick	London City (EGLC)	2021

Source: "Remote Towers – Interactive Map," International Federation of Air Traffic Controllers' Associations, 12 Sept. 2023; "Remote and Digital Tower Operations," Think Research, 2024; authors' analysis.

Several countries are planning new or expanded RTCs, most notably Norway. In July 2024, Kongsberg Defence & Aerospace announced an agreement with Norwegian ANSP Avinor to add seven more digital towers at small airports to be managed from Avinor's RTC in Bodø.[24] There are currently 14 remote towers in operation that are managed from Bodø RTC.[25] With the additional seven remote towers by 2027, the number of towers controlled from the RTC

[24] Press Release, "To deliver remote towers to seven new Norwegian airports," Kongsberg Defence & Aerospace, 3 July 2024. https://www.kongsberg.com/newsroom/news-archive/2024/kongsberg-to-deliver-remote-towers-to-seven-new-norwegian-airports/ (15 Apr. 2024).

[25] André Orban, "Three more airports join World's largest remote tower centre in Bodø, Norway," Aviation24.be, 10 Apr. 2025. https://www.aviation24.be/air-traffic-control/three-more-airports-join-worlds-largest-remote-tower-centre-in-bodo-norway/ (21 Apr. 2025).

in Bodø will increase to 21.[26] These upgrades will cement Bodø center's status as the largest RTC in the world.

Avinor's motivation to greatly expand its remote tower footprint is understandable. Many of the control towers in Norway need renovation or complete replacement. With remote towers, Avinor can avoid significant capital costs associated with building tall concrete control towers. Controllers can handle traffic at multiple airports from the same location. This offers significant efficiency improvements and lower expenses, which in turn will ensure high-quality air transportation in Norway. Importantly, Avinor notes that, from a regulatory perspective, "Remote towers are required to provide a service which is at least as safe or is even safer than the present service."[27]

In April 2025, Italy's ANSP ENAV announced it will convert the control centers at Brindisi and Padua into RTCs to manage 16 low-traffic airports.[28] According to ENAV's strategic plan, the ANSP aims to increase airports managed from these RTCs to 26 by 2033.

Another notable RTC project was announced in April 2024, when Belgian ANSP Skeyes launched its Digital Tower Test Center in Steenokkerzeel.[29] It is a prototype for the RTC being set up by Skeyes and the Walloon airport operator in Namur. By 2026, air traffic at both Charleroi and Liege airports will be managed by the new center in Namur. The Namur RTC will be responsible for air and ground traffic at both airports.

26 "Remote Towers," Avinor. https://avinor.no/en/avinor-air-navigations-services/services/remote-towers/ (15 Apr. 2025).

27 Ibid.

28 Press Release, "Strategic Plan 2025-2029. Innovation, sustainability and growth for the future of air transport," ENAV, 1 Apr. 2025. https://www.enav.it/en/node/18361 (23 Apr. 2025).

29 Press Release, "Launch of Digital Tower Test Centre by skeyes," Skeyes, 25 Apr. 2024. https://press.skeyes.be/launch-of-digital-tower-test-centre-by-skeyes-fumqca (15 Apr. 2025).

PART 4

REMOTE TOWER DEVELOPMENTS IN THE UNITED STATES

The idea for remote towers originated in the United States when FAA conducted initial tests at the Atlantic City Technical Center in 2007, as is discussed in Part 2. Air traffic controllers delivered positive feedback on the excellent visibility provided by displays, especially during night and in low-visibility meteorological conditions.[30]

FAA's 2013 Staffed NextGen Tower report stated the agency hoped to realize operational benefits from "shifting from a model of control that relies on the [out-the-window] view to one that relies on surveillance displays," including "increase[ing] capacity at night or during periods of inclement weather when impaired visual observations might otherwise lead to delays or reduced airport access levels" and "enable[ing] controllers to perform remote operations from a ground-level facility for contingency operations."[31]

FAA's enthusiasm was warranted. In the United States, additions to the FAA Contract Tower Program or tower replacements are sometimes slowed or halted due to the controller staffing deficit or budget considerations. Some smaller airports lack air traffic control

30 Daniel Hannon, et al., "Feasibility Evaluation of a Staffed Virtual Tower."

31 Ferne Friedman-Berg and Nicole Racine, "Staffed NextGen Tower Human-in-the-Loop 2 (SNT HITL 2): Camera Integration Evaluation." 1.

towers, which deny them the safety and commercial benefits of tower services. Remote towers offer a budget-conscious alternative to address these situations.

Some smaller airports lack air traffic control towers, which deny them the safety and commercial benefits of tower services. Remote towers offer a budget-conscious alternative to address these situations.

Two remote tower pilot projects were initiated by the states in the previous decade, one in Leesburg, Virginia, and the other at Loveland, Colorado, near Fort Collins. Both projects were funded by a combination of state funds and private investment, not by the FAA.[32]

In November 2021, the FAA issued an "operational viability decision" on the Saab Remote Tower System at Leesburg, authorizing it to continue managing traffic without a backup mobile tower.[33] This was not official certification, but it did trigger the type certification process between Saab and the FAA, which would allow the Leesburg remote tower to be approved as a non-federal system within the National Airspace System. Congress included $4.9 million in FY 2022 appropriations to fund contract controllers for type certification at Leesburg, as well as fund operational viability testing at Fort Collins.[34]

However, in February 2023, the FAA announced it would terminate the Leesburg remote tower's operations on June 14.[35] Saab had sent a letter to the FAA in 2022 announcing that it was pulling out of the project after nine years. The company told *The Washington Post* that it "determined there is no reasonable path for approval" under the FAA's shifting certification requirements.[36] The FAA's primary internal advocate of the technology, its former vice president of air traffic services, had also been reassigned to another role within the agency in 2022.

32 Robert Poole, "Remote Towers: Europe Many, U.S. Zero," *Aviation Policy News*, 21 May 2021.
33 Robert Poole, "More on FAA and Remote Towers," *Aviation Policy News*, 22 Nov. 2021.
34 Consolidated Appropriations Act, 2022, Joint Explanatory Statement Division L, 168 Cong. Rec. H3032, Mar. 2022.
35 Robert Poole, "Is FAA Giving Up on Remote Towers?" *Aviation Policy News*, 23 Mar. 2023.
36 Lori Aratani, "This air traffic control system helped to grow flights. Now it's being shut down." *The Washington Post*, 11 Apr. 2023.

Following the news out of Leesburg, it was reported that the Fort Collins remote tower project was "on life support."[37] Vendor Searidge pulled out of the Colorado tower project in October 2023. The local project sponsors have brought in RTX (formerly Raytheon) and Frequentis in an attempt to salvage progress made to date and complete system design approval, but FAA is no longer supporting the project.[38]

These latest setbacks suggest the FAA bureaucracy is resistant to remote and digital tower technology. The FAA Reauthorization Act of 2024 included provisions in Section 621 aimed at addressing the FAA impasse on remote/digital towers.[39]

First, the law requires FAA to create a clearly defined system design and operational approval process, and to publish milestones for achieving testing and deployment approval, within 180 days of enactment on May 16, 2024.[40] The lack of clear formal standards and FAA's ad hoc approach to system design approval bedeviled airport sponsors and technology vendors, and deterred interest in remote/digital towers in the United States. This provision would also require FAA to "assess the safety benefits of a remote tower against the lack of an existing tower,"[41] which will hopefully help the agency better understand the risks and costs that arise from inaction.

> *Sec. 621 partially reverses a 2022 FAA decision to force vendors to install their systems at the FAA Technical Center in Atlantic City, New Jersey for evaluation rather than allow those systems to be evaluated at the airports at which they would be operated, a costly deviation from international best practices.*

37 David Hughes, "Colorado Airport's Remote Tower on Life Support," *Aviation International News*, 11 Apr. 2023.

38 Bill Carey, "Colorado Advances Digital Tower Effort Dropped by FAA," *Aviation Week*, 6 Mar. 2024.

39 FAA Reauthorization Act of 2024, Pub. L. 118–63, 138 Stat. 1235, 16 May 2024. § 621.

40 49 U.S.C. § 47124(h)(1).

41 49 U.S.C. § 47124(h)(2)(E).

Second, Sec. 621 partially reverses a 2022 FAA decision to force vendors to install their systems at the FAA Technical Center in Atlantic City, New Jersey for evaluation rather than allow those systems to be evaluated at the airports at which they would be operated, a costly deviation from international best practices. Specifically, the law requires that FAA expand system design approval to at least three locations outside the Technical Center by the end of 2024.[42]

Third, despite the many setbacks, the new law recognizes the significant progress made toward achieving system design approval by Northern Colorado's project, and that forcing it to restart from square-one under the new mandated process would be cost-prohibitive. To that end, Sec. 621 states that FAA should not interpret anything in the new law as invalidating prior system design approval activity and that existing work toward this goal should be preserved.[43]

Fourth, to allow for better congressional oversight of FAA's efforts to implement the new remote tower law, Sec. 621 requires the FAA to brief legislators within 180 days of enactment and every six months thereafter through September 2028.[44] These regular briefings should help bring needed transparency to FAA's work on remote towers, where opaqueness was a common complaint among external stakeholders.

> *Despite the new directives from Congress, FAA has to date made minimal progress toward complying with the law.*

Finally, the law amends the FAA Contract Tower Program's and Contract Tower Cost Share Program's enabling statutes to explicitly add eligibility for remote towers.[45] This provision aims to level the playing field between conventional brick-and-mortar towers and remote towers. These changes should both increase the ability of small airports to add tower service and reduce per-airport expenses through lower-cost remote towers. Sec. 621 also orders FAA to prioritize testing and deployment of remote towers at those airports that

42 49 U.S.C. § 47124(h)(3).
43 49 U.S.C. § 47124(h)(4).
44 FAA Reauthorization Act of 2024. § 621(b).
45 Ibid. § 621(c).

currently lack air traffic control towers, wish to provide small and rural community air service, or are new entrants into the Contract Tower Program.[46]

Despite the new directives from Congress, FAA has to date made minimal progress toward complying with the law. The deadline for FAA to submit its comprehensive plan to Congress was November 12, 2024. No plan has been issued to date, but FAA is currently evaluating the Colorado-sponsored RTX/Frequentis remote tower system at its Atlantic City Technical Center. Internal FAA documents obtained by Reason Foundation state, "For a system to become operational in the [National Airspace System], the vendor system must obtain [system design approval] at the Tech Center," which shows FAA has not made progress in expanding this process to at least three airports outside the Technical Center as required by Congress.[47] FAA also indicated that its sudden publication of new draft technical requirements in June 2024 delayed the RTX/Frequentis installation at the Tech Center by at least four months.

Optimistic observers anticipate that FAA will issue system design approval (SDA) for the RTX/Frequentis system by spring 2026. The SDA should specify which runway configurations can utilize this technology. Some jurisdictions are preparing to submit applications to enter FAA's remote tower program once the SDA is published, which is viewed as an indicator of FAA's support for the underlying technology. Importantly, these jurisdictions may be able to leverage new 2024 FAA reauthorization provisions, such as the requirement that FAA allow the SDA process to take place at no fewer than three airports outside the Atlantic City Technical Center.

46 49 U.S.C. § 47124(h)(5).

47 Marc Scribner, "FAA Misses Congressional Targets on Remote/Digital Towers," *Aviation Policy News*, 24 Feb. 2025.

PART 5

CONCLUSION AND RECOMMENDATIONS

Remote tower technology has been proven and can provide air traffic control services to several small airports from a single facility. A controller would monitor and direct traffic at only one airport at a time but would be certified for several aerodromes. This would make more productive use of available controllers, allow redundant staffing during low-traffic periods, and allow for consolidated facilities to be located in areas desirable to current controllers and new hires. Compared to new or replacement conventional control towers, there are significant capital and operating cost advantages.

A secondary but important benefit is that successful implementation of remote tower centers would be an important step in providing additional digital technology and services for air traffic facilities throughout the National Airspace System (NAS). Digitalization is key to continuing improvements in system efficiency and communication with NAS users. Internationally, air navigation service providers are developing additional uses for this technology, including at very large airports.

FAA is sensitive to ongoing criticism about the technological advances and deployments made by other air navigation service providers and often emphasizes the higher complexity of the U.S. NAS. While it is true that the United States has some of the most congested and complex activity near major metropolitan areas, dozens of small U.S. airports have relatively simple, low-volume operations that can benefit from this technology.

Many advancements that FAA needs to make are complex and must be done carefully and step by step. Deploying remote/digital tower technology, initially at small U.S. airports, is a logical starting place. The technology is proven, and successful procedures have been published and deployed for nearly a decade. As with the prior FAA tests using virtual tower equipment, once anyone (especially controllers, but even laypeople) sees an installation, they realize that this technology can provide significant support to air traffic controllers and to the National Airspace System writ large.

FAA senior management should have a technology plan for remote/digital towers and remote tower centers that envisions the logical next steps in a rollout in the NAS. To facilitate a holistic view of the possibilities, FAA staff should conduct site visits to remote tower centers in Norway and Sweden. FAA staff should also review the simulations of the planned digital tower deployments at Singapore and Al Maktoum airports. To advance near-term deployment in the United States, FAA should consider:

- Developing a new remote tower center to manage multiple small airports;
- Testing and certification of multiple technology vendors;
- Conducting field pilots, including system design approval, at sponsor airports as contemplated in the FAA Reauthorization Act of 2024; and
- Reviewing European Union standards for (partial) applicability in the United States.

FAA is on a path to support the development of remote towers, and these efforts should be finalized and standards issued as soon as practicable. Congress should continue its encouragement and oversight to ensure FAA remains on this path to success. Ongoing attention on air traffic control modernization from the Office of the Secretary at the U.S. Department of Transportation should be sustained, with a particular focus on the near-term benefits that could be realized from proven remote tower technology.

ABOUT THE AUTHORS

Ginger Evans is a nationally recognized leader in transportation and technology innovation. She managed two of the nation's top performing airports, Denver International and O'Hare/ Midway International Airports, and served as vice president of engineering for Metropolitan Washington Airports Authority. In the private sector, she managed airport capital programs at 15 U.S. airports, two Canadian airports, as well as airports in Lisbon, Quito, Mexico City, Hamad International, Abu Dhabi, and Al Duqqam. Her experience with transit projects includes the Dulles Silver Line, MTA Oversight, MIA Mover, DIA light rail station, and the HIA Doppelmayr.

For JFK New Terminal One, Evans negotiated a groundbreaking Master Systems Integration agreement with top airport systems providers that will support operations with the highest levels of customer service, sustainability performance, efficient operating expenses, and business intelligence. Following the onset of the COVID-19 pandemic, Carlyle Airport Group organized the AAAE Airport Consortium on Consumer Trust (ACT), an industry response to develop and share best practices. She developed ACT working groups to perform pilot projects and publish white papers in support of overall industry recovery and improved operations.

Evans is an *ex officio* member of the Executive Committee of Transportation Research Board and is one of only two industry leaders recognized twice by *Engineering News-Record* for a leading contribution to the industry (1994 for Denver International and 2019 for O'Hare International). She has served as advisor to two private equity funds in Mexico for over 10 years. In 2022, she was given the Award of Excellence from the Airport Consultants Council. She also serves as the chief strategy officer for Carlyle Airport Group, based in Washington, D.C.

Marc Scribner is a senior transportation policy analyst at Reason Foundation.

Scribner's work focuses on a variety of public policy issues related to transportation, land use, and urban growth, including infrastructure investment and operations, transportation safety and security, risk and regulation, privatization and public finance, urban redevelopment and property rights, and emerging transportation technologies such as automated road vehicles and unmanned aircraft systems. He frequently advises policymakers on these matters at the federal, state, and local levels.

Scribner has testified numerous times before Congress at the invitation of both Democrats and Republicans on issues including highway revenue collection, traffic congestion management, public transit productivity, freight rail regulation, airport financing, and air traffic control modernization. He is a member of the Transportation Research Board's Standing Committee on Emerging Technology Law.

He has appeared on television and radio programs in outlets such as Fox Business Network, National Public Radio, and the Canadian Broadcasting Corporation, and has also written for numerous publications, including *USA Today, Washington Post, Wired, CNN.com, MSNBC.com, Forbes,* and *National Review*. And his work has been featured by *The Wall Street Journal*, *New York Times, Washington Post, Los Angeles Times, Scientific American, Congressional Quarterly, Washington Monthly, POLITICO*, CNN, Bloomberg, BBC, C-SPAN, and other print, television, and radio outlets.

Scribner joined Reason Foundation in 2020 after more than a decade at the Competitive Enterprise Institute, where he was a senior fellow in transportation policy. He received his undergraduate degree in economics and philosophy from George Washington University.

The FAA Is Blocking Remote Towers Used Worldwide-Even Though They'd Help Solve The Controller Shortage For A Fraction Of The Cost

by Gary Leff on May 24, 2025

Marc Scribner and Ginger Evans have a new report **on remote air traffic control towers.** looking at why the U.S. won't adopt them even as they're being used successfully around the world.

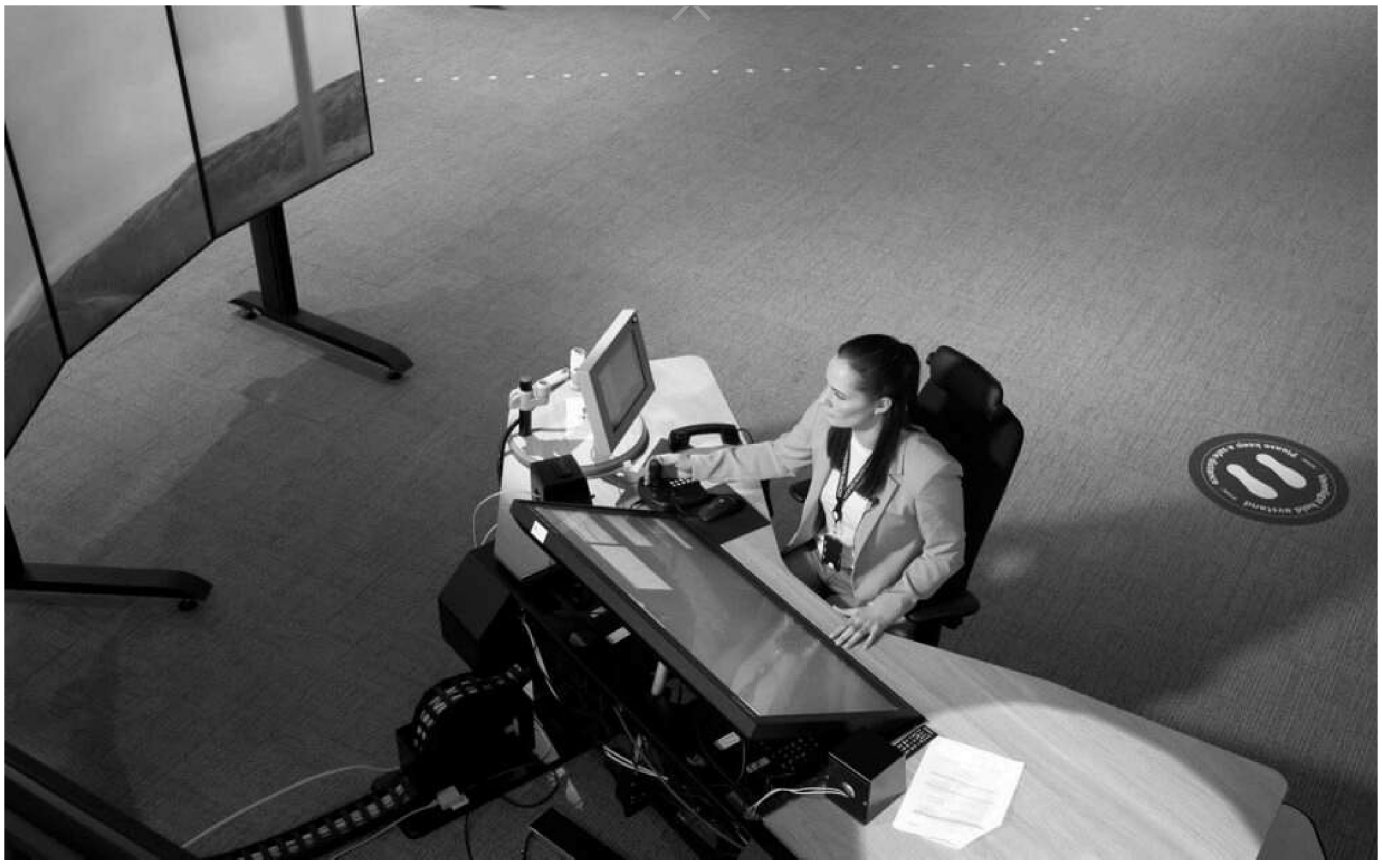
Remote towers would help a lot with the air traffic control shortage. They're in use around the world, Congress has told the FAA to start using them, but the agency's intransigence has blocked efforts for years.

These are facilities where controllers are not physically on-site at the airport. They use high-definition cameras, sensors, and communication links to transmit a real-time 360° view of the airport environment to controllers sitting at a n air traffic control center in another location.

They have multiple panoramic screens and integrated displa augmented by tools like radar feeds, night-vision cameras, a controller's situational awareness. Operations are basically t

Why You Should Pull Your Kids Out Of School: Turn Miles And ...

Read More



Norway's BodeJ Remote Tower Centre

Digital visuals can improve what controllers see, especially in low-light or bad weather. The remote tower center can also serve as a backup if a tower is evacuated or out of service (if Newark controllers walk off the job!).

Physical proximity no longer matters. Controllers don't have to sit at the airfield, they can work in whatever metro areas make sense. They don't have to be deployed to low-volume airports, either.

Sweden launched the world's first remote tower at Ornskoldsvik Airport in 2015 and has built centers in Sundsvall and Stockholm that control eight airports. Norway operates 11 airports from a single center at Bod0. A *single controller* will handle multiple low volume airports from that center.

London City Airport has been managed by a remote tower since 2021, with controllers located at NATS's Swanwick center. Singapore's Changi Airport has be1
Dubai's Al Maktoum International (DWC) is planning remote
on a digital tower system for Kingston Airport. There are at Ii
advanced development across 11 countries, and 10 remote·
airports. The U.S. has none even though the FAA pioneered t

The FAA spent $73 million on a 157-foot tower at Teterboro,
million on a new 370-foot tower in Charlotte in 2022. Replact:111c1 n Luvvcl _,.., Read More IluII;:,. uuL a
full remote tower setup can run $3-4 million.

Congress noted this in the recent FAA reauthorizaefo, finding that remote towers significantly reduce per-airport expenses and can help more small airports afford tower services. Why pour $17 million into a 115-foot concrete tower (the FAA estimate for Kissimmee, Florida) when you can get the same digital capability at a fraction of the cost - with safer operations and easier staffing?

- Each staffed tower requires a dedicated crew of controllers and supervisors, even if the airport only sees a handful of flights at off-peak hours.

- Remote towers centralize personnel, allowing smarter scheduling and multitasking. Instead of three separate single-controller towers each needing their own supervisor and support, you can have one management team overseeing multiple operations from one site. Controllers at a remote center can cover for each other more easily, reducing downtime from breaks or absences.

  For late-night shifts, where safety rules require at least two controllers on duty even at sleepy airports, a central facility can meet that redundancy without having two people sitting idle per tower all over the map.

- And they can be located in a lower cost of living area, or a more desirable place to live, making recruiting easier.

Many smaller U.S. airports today simply lack control towers entirely, meaning pilots are on their own to sequence landings. That limits the utility of those airports. Remote towers make it possible to give these airports tower services, bringing the safety and commercial benefits of controlled airspace to places that could never afford, say, $100 million.

Remote towers mean more airports can get ATC coverage, for less cost, with better technology and more flexible staffing. That's why the world is moving this direction.

However, the FAA has been slow, and even obstructive. The FAA basically ignored remote towers, with two state projects launching the concept. Leesburg, Virginia was a successful pilot, performing flawlessly for four years, but the FAA pulled the plug in 2023 anyway. That's meant a downgrade in safety and capacity for the growing aviation community there.

At the time of final certification, FAA Tech Ops treated the system as if it were a brand new aircraft design, even demanding a "reverse engineering" of the already-working system to justify its safety. And they demanded that the vendor pick up the entire remote tov
Technical Center in Atlantic City for testing. Saab withdrew f
costs and timeline.

Air traffic control has been run one way for decades, and an assignments and procurement projects) gets killed. What im safety technology that can save money and improve service their own regulator. FAA lethargy and turf battles killed a saf1, more aggressively.

Last year's FAA Reauthorization bill, though, included bipartisan language requiring the FAA to reate a clearly defined process for system design and operational approval of remote/digital towers, and publish milestones for testing and deployment and requires the FAA to assess the safety benefits of a remote tower against no tower at all. It also directs FAA to allow remote tower testing at multiple field locations rather than requiring setup in Atlantic City and shouldn't scrap or duplicate prior testing completed in Leesburg and Fort Collins, Colorado.

There's something to **rethinking how air traffic control works entirely** in a digital world. But if we're realistic, and can only expect incremental improvement, surely this is one we can accomplish?

Attachment #3

Airport Categories

There are approximately 14,400 private-use (closed to the public) and 5,000 public-use (open to the public) airports, heliports, and seaplane bases. Approximately 3,300 of these public-use facilities are included in the National Plan of Integrated Airport Systems (NPIAS). Airports or portions of airports, included in the NPIAS may be considered for AIP funding. An airport is defined in the law as any area of land or water used or intended for landing or takeoff of aircraft including appurtenant area used or intended for airport buildings, facilities, as well as rights of way together with the buildings and facilities. Special types of facilities such as seaplane bases and heliports are included in the airport categories listed below.

The law categorizes airports by type of activities, including commercial service, primary, cargo service, reliever, and general aviation airports, as shown below:

Categories of Airport Activities

Commercial Service	Publicly owned airports with at least 2,500 annual enplanements and scheduled air carrier service (§47102(7)). Primary airports are a commercial service airport with more than 10,000 annual enplanements (§47102(16)).	
Large Hub	Receives 1 percent or more of the annual U.S. commercial enplanements	Primary
Medium Hub	Receives 0.25 to 1.0 percent of the annual U.S. commercial enplanements	Primary
Small Hub	Receives 0.05 to 0.25 percent of the annual U.S. commercial enplanements	Primary
Nonhub	Receives less than 0.05 percent but more than 10,000 of the annual U.S. commercial enplanements	Primary
Nonprimary Commercial Service, Nonhub	Also referred to as nonhub nonprimary, these airports have scheduled passenger service and between 2,500 and 10,000 annual enplanements.	Nonprimary
Reliever	An airport designated by the Secretary of Transportation to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community (§47102(23)).	Nonprimary

General Aviation	A public-use airport that does not have scheduled service or has scheduled service with less than 2,500 passenger boardings each year (§47102(8)).	Nonprimary

The Nonprimary category was established for the distribution of nonprimary entitlements apportioned under the AIP (§47114(d)(3)). Included in this category are the nonprimary commercial service, reliever, and general aviation airports. Nonprimary airports are identified with a role in the national airport system based on their activity. Five roles are utilized: ***National, Regional, Local, Basic, and Unclassified***.

Definition of Airport Categories

1. **Commercial Service Airports** are publicly owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service. Passenger boardings refer to revenue passenger boardings on an aircraft in service in air commerce whether or not in scheduled service. The definition also includes passengers who continue on an aircraft in international flight that stops at an airport in any of the 50 States for a non-traffic purpose, such as refueling or aircraft maintenance rather than passenger activity. Passenger boardings at airports that receive scheduled passenger service are also referred to as Enplanements.
    1. **Nonprimary Commercial Service Airports** are Commercial Service Airports that have at least 2,500 and no more than 10,000 passenger boardings each year.
    2. **Primary Airports** are Commercial Service Airports that have more than 10,000 passenger boardings each year. Hub categories for Primary Airports are defined as a percentage of total passenger boardings within the United States in the most current calendar year ending before the start of the current fiscal year. For example, calendar year 2014 data are used for fiscal year 2016 since the fiscal year began 9 months after the end of that calendar year. The table above depicts the formulae used for the definition of airport categories based on statutory provisions cited within the table, including Hub Type described in 49 USC 47102.
2. **Cargo Service Airports** are airports that, in addition to any other air transportation services that may be available, are served by aircraft providing air transportation of only cargo with a total annual landed weight of more than 100 million pounds. "Landed weight" means the weight of aircraft transporting only cargo in intrastate, interstate, and foreign air transportation. An airport may be both a commercial service and a cargo service airport.
3. **Reliever Airports** are airports designated by the FAA to relieve congestion at Commercial Service Airports and to provide improved general aviation access to the overall community. These may be publicly or privately-owned.
4. **General Aviation Airports** are public-use airports that do not have scheduled service or have less than 2,500 annual passenger boardings (49 USC 47102(8)). Approximately 88 percent of airports included in the NPIAS are general aviation.

In cooperation with the aviation community, FAA completed two top down reviews of the existing network of general aviation facilities included in the NPIAS. The results of these efforts are contained in two reports (**General Aviation Airports: A National Asset**) and have been fully incorporated into the biennial NPIAS. The airport roles capture the diverse functions and economic contributions GA airports make to their communities and the Nation. Five categories for airports serving general aviation (includes nonprimary commercial service, relievers and general aviation) were developed based on existing activity levels. These roles are shown below. The criteria are contained in FAA Order 5090.5 and Appendix C of the Current Published NPIAS.

General Aviation Airport Categories

National	Support the national airport system by providing communities access to national and international markets in multiple States and throughout the United States. National airports have very high levels of aviation activity with many jets and multiengine propeller aircraft.
Regional	Support regional economies by connecting communities to regional and national markets. Generally located in metropolitan areas and serve relatively large populations. Regional airports have high levels of activity with some jets and multiengine propeller aircraft. The metropolitan areas in which regional airports are located can be Metropolitan Statistical Areas with an urban core population of at least 50,000 or Micropolitan Statistical Areas with a core urban population between 10,000 and 50,000.
Local	Supplement local communities by providing access to markets within a State or immediate region. Local airports are most often located near larger population centers, but not necessarily in metropolitan or micropolitan areas. Most of the flying at local airports is by piston aircraft in support of business and personal needs. These airports typically accommodate flight training, emergency services, and charter passenger service.
Basic	Links the community with the national airport system and supports general aviation activities, such as emergency response, air ambulance service, flight training, and personal flying. Most of the flying at basic airports is self-piloted for business and personal reasons using propeller-driven aircraft. They often fulfill their role with a single runway or helipad and minimal infrastructure.
Unclassified	Currently in the NPIAS but with limited activity.

Contact Us

- Ask a question about airport categories

Last updated: Wednesday, December 7, 2022

Attachment #4

Site 3 Boundary Line
1.1 Acres

Lat.: N 40° 27' 00.53"
Long.: W 105° 00' 18.12"

20-foot Buffer

Lat.: N 40° 26' 57.68"
Long.: W 105° 00' 16.79"

20'

Site 3: Open
Lat.: N 40° 26' 59.20"
Long.: W 105° 00' 17.22"
Site Elev.: 5,012' MSL
Estimated ATCT Total Height: 105' (Controller's Eye 75')
Part 77 Existing Height: 5,170', VFR 5,170' (Horizontal)
Part 77 Ultimate Height: 5,175' VFR 5,175' (Horizontal)

Site 2 Boundary Line
1.0 Acres

20'

20-foot Buffer

Lat.: N 40° 27' 00.53"
Long.: W 105° 00' 23.96"

Lat.: N 40° 26' 57.62"
Long.: W 105° 00' 22.61"

Site 2: Detention Pond
Lat.: N 40° 26' 59.10"
Long.: W 105° 00' 23.02"
Site Elev.: 5,008' MSL
Estimated ATCT Total Height: 109' (Controller's Eye 79')
Part 77 Existing Height: 5,129', VFR 5,165' (Transitional)
Part 77 Ultimate Height: 5,129', VFR 5,165' (Transitional)

20-foot Buffer

20'

Site 1 Boundary Line
1.1 Acres

Relocate
Fuel Farm

Lat.: N 40° 27' 01.69"
Long.: W 105° 00' 29.07"

Lat.: N 40° 26' 59.83"
Long.: W 105° 00' 28.21"

Site 1: Former Remote ATCT Building & Fuel Farm
Lat.: N 40° 27' 00.83"
Long.: W 105° 00' 28.40"
Site Elev.: 5,005' MSL
Estimated ATCT Total Height: 114' (Controller's Eye 84')
Part 77 Existing Height: 5,080', VFR 5,116' (Transitional)
Part 77 Ultimate Height: 5,080', VFR 5,116' (Transitional)

Runway 6-24 (Crosswind)

Runway 15-33 (Primary) Midfield

Main Apron

Taxiway D

Taxiway E

Taxiway C

Taxiway A

Distance to Midfield (Primary)
Site 1: 773'

Distance to Midfield (Primary)
Site 2: 1,076'

Distance to Midfield (Primary)
Site 3: 1,217'

Runway 15-33 (Primary)

0' 200' 400'

N

NORTHERN COLORADO REGIONAL AIRPORT

DIBBLE

Legend:

- Existing Facilities
- Future Development
- Existing Property Line
- Site Boundary
- Buffer & Clear Zone

Notes:

- Conceptual Only.
- ATCT: Air Traffic Control Tower
- Utilities (Power, Water, Sanitary Sewer, Coms, Natural Gas) running directly alongside all sites or located less than 100 feet. San. Sewer main located approx. 300 feet from Site 3.
- Estimated tower heights based on 0.8 degree angle of incidence to movement area and ultimate ALP. No shadow analysis performed.
- Other airport quadrants are unsuitable for tower site due to constraints including lack of landside access, utilities, lower terrain heights, water table heights, etc....

Not For Construction

D R A F T

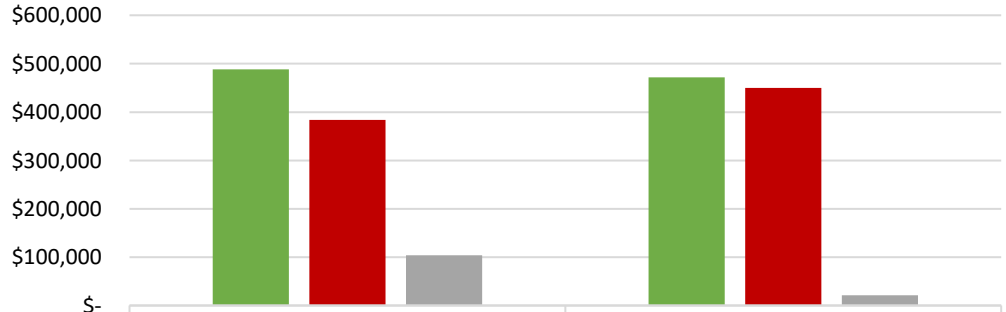
Scale based on a 11"x17" sheet.

Northern Colorado Rgnl'
VISTA Preliminary ATCT Sites
Project Exhibit
Date: 05.27.25

K:\2025\1325006 FNL On-Call General\CAD\Exhibits\2025-2 - VISTA Preliminary Sites\FNL VISTA Preliminary Sites 05.27.25.dwg

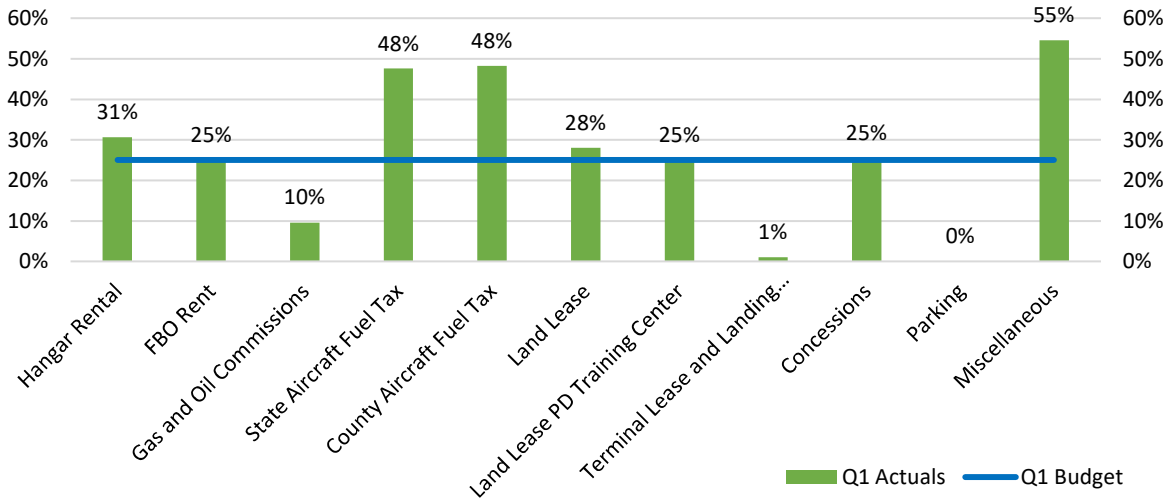
5. Quarterly Airport Financial Update

YTD Operating Revenue & Expenditures 2025 vs 2024

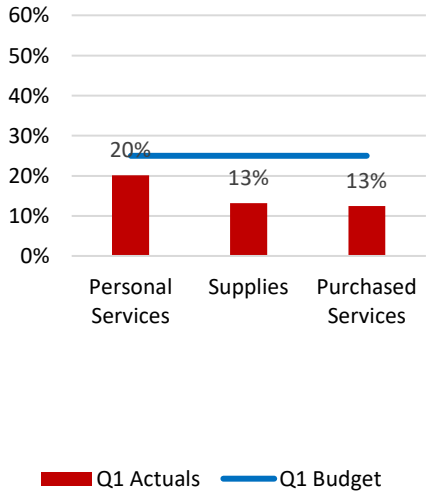


	Y-T-D 2025 Actual	Y-T-D 2024 Actual
TOTAL OPERATING REVENUES	$488,268.18	$471,549.01
TOTAL OPERATING EXPENSES	384,118.77	449,917.80
OPERATING GAIN (LOSS)	$104,149.41	$21,631.21

Q1 Revenue vs. Budget



Q1 Exp vs. Budget



Northern Colorado Regional Airport Commission

Airport Statement of Revenues and Expenses - From 01/01/2025 to 3/31/2025

AIRPORT FUND 600

		Q1 2025 vs. 2024					Q1 2025 Actuals vs. Budget		
		2025		2024			YTD		
	2025 Total Budget	Actual	% of total '25 budget	Actual	% of total '24 budget	$ Variance +/(-)	Actual	Budget	$ Variance +/(-)
OPERATING REVENUES									
Land Lease	615,310	172,484	28%	158,307	24%	14,178	172,484	153,828	18,657
Land Lease PD Training Center	433,664	108,416	25%	103,043	24%	5,374	108,416	108,416	0
Hangar Rental	159,000	48,712	31%	47,380	22%	1,332	48,712	39,750	8,962
County Aircraft Fuel Tax	86,625	41,831	48%	41,608	44%	223	41,831	21,656	20,175
State Aircraft Fuel Tax	70,875	33,745	48%	24,939	44%	8,806	33,745	17,719	16,027
Gas and Oil Commissions	315,000	30,177	10%	47,244	100%	(17,067)	30,177	78,750	(48,573)
FBO Rent	110,809	27,702	25%	23,543	22%	4,160	27,702	27,702	0
Concessions	20,000	5,080	25%	5,094	25%	(14)	5,080	5,000	80
Terminal Lease and Landing Fees	89,533	896	1%	1,112	1%	(216)	896	22,383	(21,487)
Parking	200,000	-	0%	-	0%	-	-	50,000	(50,000)
Miscellaneous	35,230	19,224	55%	19,279	59%	(55)	19,224	8,808	10,417
TOTAL OPERATING REVENUES	**$ 2,136,046**	**$ 488,268**	**23%**	**$ 471,549**	**27%**	**$ 16,719**	**$ 488,268**	**$ 534,012**	**$ (45,743)**
OPERATING EXPENSES									
Personal Services	1,231,592	248,058	20%	162,176	14%	85,883	248,058	307,902	(59,844)
Supplies	129,729	17,175	13%	27,758	22%	(10,583)	17,175	32,436	(15,261)
Purchased Services	950,772	118,885	13%	259,984	12%	(141,099)	118,885	237,699	(118,814)
TOTAL OPERATING EXPENSES	**$ 2,312,093**	**$ 384,119**	**17%**	**$ 449,918**	**13%**	**$ (65,799)**	**$ 384,119**	**$ 578,037**	**$ (193,918)**
OPERATING GAIN (LOSS)	**$ (176,047)**	**$ 104,149**		**$ 21,631**		**$ 82,518**	**$ 104,149**	**$ (44,026)**	**$ 148,175**
NON-OPERATING REV/(EXP)									
Interest Income	51,450	17,955	35%	28,765	59%	(10,810)	17,955	12,864	5,091
Other non-Operating Revenues		7,029	0%	-	0%	7,029	7,029	-	7,029
Capital Contributions	14,439,240	8,160	0%	2,414,288	11%	(2,406,129)	8,160	3,609,810	(3,601,651)
Capital Expenditures	(18,121,404)	(83,992)	0%	(1,873,203)	5%	1,789,211	(83,992)	(4,530,351)	4,446,359
TOTAL NONOPERATING REV/(EXP)	**$ (3,630,714)**	**$ (50,848)**		**$ 569,851**		**$ (620,699)**	**$ (50,848)**	**$ (907,677)**	**$ 856,829**
CHANGE IN NET POSITION	**$ (3,806,761)**	**$ 53,302**		**$ 591,482**		**$ (538,180)**	**$ 53,302**	**$ (951,703)**	**$ 1,005,004**

BEGINNING FUND BALANCE	**$ 2,236,896**
CHANGE IN NET POSITION	**53,302**
ENDING FUND BALANCE	**$ 2,290,197**

NORTHERN COLORADO
REGIONAL AIRPORT
4900 Earhart Rd • Loveland, Colorado 80538
(970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER: 6

MEETING DATE: June 16, 2025

PREPARED BY: Aaron Ehle, Planning & Development Specialist

TITLE

Runway 15-33 Widening Construction Service Contract Award

RECOMMENDED AIRPORT COMMISSION ACTION

Recommend that the City Councils approve a contract with Dibble Engineering for construction services for the Runway 15-33 widening project

BUDGET IMPACT

Negative - the contract amount is $1,287,784.98

SUMMARY

The widening of Runway 15-33 from 100 to 150 feet is a key project highlighted in the Airport's Master Plan that has been coordinated with the FAA for many years. The project will improve safety and enhance the airport's marketability to commercial airlines.

FAA runway design standards are based on the Aircraft Design Group (ADG) classification and the weight of the critical design aircraft. FNL's runway is classified as ADG III, with the Airbus A319/A320 identified as the critical design aircraft. To comply with current FAA design standards. In addition to widening, the project will include improvements to taxiway geometry, pavement markings, lighting, signage, and blast pads.

The Airport currently holds an on-call contract with Dibble, its engineer of record. In July 2023, Dibble was contracted to provide design and bid phase services for the Runway widening project, which has now completed the design phase. Following a competitive bidding process, Holcim-WCR, Inc. was selected as the construction contractor, pending approval of the contract by the City Councils.

If recommended by the Airport Commission and approved by the City Councils, Dibble will serve as the prime consultant for construction phase services, as detailed in the attached proposal.

ATTACHMENTS

- Dibble Engineering Construction Services Proposal
- Resolution #R-7-2025

p 303.872.5756 | 2696 South Colorado Blvd, Suite 330
f 303.353.4068 | Denver, CO 80222
dibblecorp.com

March 19, 2025

Northern Colorado Regional Airport
4900 Earhart Road
Loveland, CO 80538

Attention: Mr. John S. Kinney, CAE CM
Airport Director

RE: CONSTRUCTION SERVICES PROPOSAL
FAA Grant Number: 3-08-0023-047-2025
CDOT Grant Number: TBD
Construction Phase Services
Runway 15-33 Widening

We appreciate the opportunity to provide construction phase services to the Cities of Loveland and Fort Collins for the *Runway 15-33 Widening* project at the Northern CO Regional Airport (FNL). This proposal has been prepared in accordance with the direction provided by the FAA and FNL and with the information discussed during the FAA Project Kick-Off Meeting held on March 6, 2025. Dibble, as the prime consultant, is proposing to complete the Scope of Work as included in this proposal as follows:

A. <u>Pre-Construction Phase Services</u>:

1.	Dibble (Civil and Construction Management).....	$63,507.40
	Subtotal.....	**$63,507.40**

B. <u>Construction Coordination and Inspection Phase Services</u>:

1.	Dibble (Civil and Construction Management).....	$643,589.53
2.	Terracon (Quality Assurance Testing).....	$263,130.00
3.	CR Engineers (Electrical).....	$181,947.15
	Subtotal.....	**$1,088,666.68**

C. <u>Post Construction Phase Services</u>:

1.	Dibble (Civil and Construction Management).....	$70,413.90
2.	Ardurra (FAA AGIS As-Built Survey).....	$55,697.00
3.	Delta Field Services (Record Drawing/CAD Survey).....	$9,500.00
	Subtotal.....	**$135,610.90**

Total..... $1,287,784.98

DIBBLE

Transmitted herewith is our proposed Scope of Work, Project Exhibit, Cost Estimate, Fee Summaries, Derivation of Fee Proposals, Estimated Manhours matrices, Estimated Direct Costs worksheets, full subconsultant proposals, and AGIS Planning Guide.

We are very grateful for the opportunity to work with FNL on this critical project. If you need additional information or have questions, please do not hesitate to contact us.

Sincerely,

Jared Bass, P.E
Airport Development - Group Leader
Vice President

John Cessar, P.E.
Airport Development – Sr. Project Manager

NORTHERN COLORADO REGIONAL AIRPORT

DIBBLE

SCOPE OF WORK
Northern CO Regional Airport
Runway 15-33 Widening
FAA AIP No. 3-08-0023-047-2025
March 19, 2025

Introduction

Dibble (Engineer) has been requested by the Cities of Loveland and Fort Collins (Sponsor) to provide construction phase services for the *Runway 15-33 Widening* project at Northern CO Regional Airport (Airport or FNL). This project will widen Runway 15-33 from 100-feet to a total width of 150-feet. New structural runway pavement will be constructed adjacent to the existing runway pavement section, with a key-in section. It will also include new runway lighting, signage, and stormwater edge drains. The five existing connector taxiways adjacent to the east side of the runway will be reconstructed to meet geometric standards and to tie into the new runway edge. The blast pads on each end of the runway will be widened to 200-feet.

The widening of the runway will also include the following items:

- Remove existing edge drain system (both sides of runway)
- Remove existing runway lighting and signage and associated electrical infrastructure
- Demolition of existing connector taxiway pavement to widened runway limit and FAA standards
- Removal and/or relocation of the existing 4-box PAPIs (two sets)
- Installation of new edge drains and associated drainage infrastructure (both sides of runway)
- Installation of new LED HIRL and runway signage, including updating electrical infrastructure and circuitry as needed.
- Re-grading of the existing infields within the existing and future Runway Safety Area (RSA) to meet current FAA Standards (FAA AC 150/5300-13B, *Airport Design*)
- Seal coat of entire runway
- Seal coat of the connector taxiways (up to the runway holding position markings)
- New pavement markings on entire runway

The scope of work has been developed in accordance with the Pre-Construction Kick-Off Meeting that was held with the FAA on March 6, 2025. It is anticipated that FAA Entitlements, FAA BIL, FAA Discretionary, CDOT-Aeronautics, and local matching funds will be used to fund the construction. The estimated construction cost (including construction management) is approximately $16.9M. Reference attached cost estimate.

This proposal is based on a 203-calendar day (29 weeks) construction period. See details below:

PHASING SUMMARY

	PHASE DURATION
PHASE 1 (STA 1+00 TO 36+15) RUNWAY 15–33 (SOUTH) STRUCTURAL & BLAST PAD PAVEMENT WIDENING, CONNECTOR TAXIWAY GEOMETRY, GRADING & DRAINAGE, ELECTRICAL IMPROVEMENTS, PAPI RELOCATION.	70 CALENDAR DAYS
PHASE 2 (STA 36+15 TO 90+00) RUNWAY 15–33 (NORTH) STRUCTURAL & BLAST PAD PAVEMENT WIDENING, CONNECTOR TAXIWAY GEOMETRY, GRADING & DRAINAGE, ELECTRICAL IMPROVEMENTS, PAPI ADJUSTMENT, PAVEMENT MARKINGS.	91 CALENDAR DAYS
STOP PERIOD: ASPHALT CURE PERIOD	30 CALENDAR DAYS
PHASE 3 (STA 3+00 TO 88+00)	30 CALENDAR NIGHTS – NIGHT WORK ONLY
RUNWAY SAW–CUT GROOVING (P–621)	(10:00 PM TO 5:00 AM MST)
PHASE 4 (STA 1+00 TO 90+00) EMULSIFIED SEAL COAT (P–608), TEMPORARY PAVEMENT MARKINGS (P–620)	5 CALENDAR NIGHTS – NIGHT WORK ONLY (10:00 PM TO 5:00 AM MST)
SUBSTANTIAL COMPLETION	196 CALENDAR DAYS
STOP PERIOD*: BETWEEN TEMPORARY AND PERMANENT MARKINGS	24 CALENDAR DAYS *PUNCHLIST WORK AUTHORIZED
PHASE 5 (STA 1+00 TO 90+00) RUNWAY 15–33 PERMANENT PAVEMENT MARKINGS (P–620)	7 CALENDAR NIGHTS – NIGHT WORK ONLY (10:00 PM TO 5:00 AM MST)
FINAL COMPLETION – PROJECT TOTAL:	203 CALENDAR DAYS

The following Dibble staff are expected on this project:

- Sr. Project Manager — Jared Bass, P.E.
- Construction Resident Engineer — John Cessar, P.E.
- Sr. Project Engineer/Inspector — Mario Maraccini, P.E.
- Senior Designer — Travis Woodman
- Project Administrative Assistants — Jim Hodge and Emily Grubb
- Airport Planner — Thibault Sirigu

The following subconsultants are anticipated on this project (their respective proposals are attached):

- As-Built-AGIS Survey and Imagery: Ardurra — Jeremy McAlister, P.E.
- Record Drawing/CAD Survey: Delta Field Services — Corey Weber, P.L.S.
- QA Testing: Terracon — Alec Strassburg, P.E.
- Electrical Inspection: CR Engineers — Catherine Alcorn, P.E.

Construction Phase Services

1) Preconstruction Services (Lump Sum):

a) Preconstruction Management and Administration: provide overall project management, coordination, support, and administration necessary to monitor the Contractor's operations and deliverables. Included in this effort is the daily and weekly coordination with the contractor, construction management teams, FAA, CDOT, and FNL staff over the course of the project that are outside the specific tasks noted herein.

b) Preconstruction Conference: conduct the Preconstruction Conference and provide review of the construction documents. Dibble will prepare and provide the meeting agenda and sign-in sheet, facilitate the meeting, and issue meeting minutes. The Preconstruction Conference will be held at the Airport and via video conference. It is anticipated that most of the Dibble Construction Management Team will attend this 2-hour meeting.

c) Safety Risk Management Meeting (SRM): Dibble will attend and participate in the SRM that is expected to be conducted by the Air Traffic Control Tower Staff. During this meeting, Dibble will provide the construction phasing and safety guidelines that are in place and will be required of the Contractor to implement during construction. Discussion will be held to assess the safety of the project, phasing guidelines, and risks. It is anticipated that this will be a full-day meeting requiring Dibble construction staff.

d) FAA-ATO Strategic Event Coordination (SEC) Form: Dibble will assist FNL in preparing and submitting the FAA-ATO Strategic Event Coordination (SEC) form. This form is required 45 calendar days prior to any runway closure.

e) Construction Management Plan (CMP): prepare a CMP in accordance with the FAA – Northwest Region standard requirements. At a minimum the CMP shall include project scope of work and description, Engineer's roles and responsibilities, Contractor's responsibilities, Quality Assurance (QA) Testing Standards and frequency for each material, Quality Control (QC) Testing Standards and frequency for each material, procedures to verify compliance, and the Contractor's Quality Control Program (QCP).

This report shall be submitted to the FAA a minimum of 10 calendar days before the anticipated start of construction.

f) Preconstruction Conference Submittal Reviews and Coordination: review project submittals required at the Preconstruction Conference as identified within the contract documents. The following submittals are anticipated:

- Contractor's CSPP Compliance Report
- Overall Construction Schedule
- Material Submittal Schedule
- Schedule of Values

- Contractor's Emergency Contact Information
- List of Proposed Construction Equipment and Construction Heights
- Barricade Plan
- Traffic Control Plan
- Contractor Quality Control Plan (QCP)

g) Construction Equipment Submittal to OE/AAA: coordinate with the Contractor in developing and submitting updated construction equipment heights, locations, and timeframes to the FAA Airspace Review OE/AAA website that are outside of what has already been submitted by the Dibble Team during the design phase.

2) Construction Coordination and Inspection Services (Cost + Fixed Fee (CPFF)):

It is estimated that Construction will occur between May – November 2026. This proposal is based on a 203 calendar day (29 weeks) construction period. See detailed construction phasing on page 1.

a) Construction Management and Administration**:** provide construction management, coordination, support, and administration necessary to monitor the Contractor's operations and deliverables. Included in this effort is the daily and weekly coordination with the contractor, construction management teams, FAA, CDOT, and FNL staff over the course of the project that are outside the specific tasks noted herein.

b) Site Visits and Observations: the Sr. Project Manager, Construction Resident Engineer and Construction Inspector will all be needed to provide site visits to observe, monitor, and track the progress of the work and conformance thereof with the contract documents and standards identified within the design, including compliance with safety and construction traffic control in accordance with the CSPP. The following is a break-out of site visits over the 29-week project for each person:

- Sr. Project Manager: 1 day, every other week, 10-hour shift (145 hours)
- Construction Resident Engineer: 1 day every week, 10-hour shift (290 hours)
- Construction Inspector: 5 days, every week, 10-hour shift (1,450 hours)

The electrical consultant will also be on site occasionally to observe, monitor, and track the progress of the work and conformance thereof with the contract documents and their design. See CR Engineer's sub-proposal for their inspection and observation effort for electrical items.

c) Weekly Construction and Safety Meetings: prepare the weekly construction meeting agendas, facilitate the meetings, and issue meeting minutes. The Resident Engineer and Construction Inspector will attend these weekly meetings to stay current on the construction activities.

d) Weekly Certified Payroll and Davis Bacon Review: coordinate and review, on a weekly basis, all certified payroll documentation required for this project to be compliant with the contract documents and Federal Davis Bacon Wage Determinations, (Contractor and subcontractors on a weekly basis). This effort also includes assisting the contractors to obtain federally-approved positions not specifically identified in the current federal rates and fringes.

e) Contractor Employee Federal Interviews: the construction inspector will perform the Federal Interviews in accordance with the FAA requirements for labor standards verification. Multiple interviews will be conducted weekly with different construction staff. Records of the interviews will be kept and submitted to the FAA upon completion of the project.

f) Weekly FAA Reports (5370-1): develop the weekly FAA 5370-1 *Construction Progress and Inspection Reports* and submit to the FAA. Reports include record of daily activities, working staff, manhours, equipment and equipment hours, weather, completion progress, material acceptance, quality control reports, and changes to the construction plans.

g) Weekly Quantity Calculations: continuously monitor and track the construction material quantities throughout the course of the construction phase and provide weekly review summaries to the Airport and FAA. The Construction Inspector will assist with the verifying and tracking of constructed in-place quantities during the full-time inspection services.

h) Monthly Payment Application Coordination and Review: review and track project quantities in the field and on the Contractor's As-Builts. Coordinate these inspected quantities with the contractor and coordinate prior to the submittal of monthly payment applications. Assist the Airport in the regular draw-down of the federal and state grants for payment on the construction services.

This item would also require management and balance of quantities and costs broken out between the AIP-Entitlement and AIP-BIL grants, as well as the respective CDOT grant matches.

i) Change Order Review and Coordination: coordinate and review Contractor Change Order Requests (COR), including verification of project quantities as needed, (estimated at approximately 4 COR's). A complete cost analysis will be prepared (as needed) for each change order that may occur.

j) Material Shop Drawing Review and Coordination: review and provide a response to construction material and general project submittals as requested, estimated at approximately 45 original submittals. It is also estimated that the Contractor will need to resubmit approx. 15 of the original submittals for a total amount of 60 submittal reviews during the project.

k) RFI Review and Coordination: coordinate, review and provide a response to construction and general project Requests for Information (RFI), (estimated at approximately 15 RFI's).

l) ESI Review and Coordination: coordinate, review and develop necessary Engineer's Supplemental Information (ESI) documents, (i.e. new construction plans), additional details, or sketches as revisions to the construction specifications and/or plans, (estimated at approximately 6 ESI's).

m) DBE Compliance and Coordination: coordinate and review DBE efforts and documentation required for this project to be compliant with the contract documents. We will assist FNL in finalizing the Annual Year End DBE report as well as track DBE progress with the current goals and program.

n) QA/QC Testing Coordination and Review: coordinate, schedule, observe, and review QA/QC actions. This includes scheduling of QA testing activities, ensuring the contractor is scheduling the QC testing activities, reporting the QA/QC results, reviewing the results with the team, and any recommendations that might be required to ensure the project is meeting the material specifications.

o) Substantial Completion Inspection: conduct the Substantial Completion Walk required before the opening each phase to aircraft operations. The Dibble Team will schedule the meeting, invite the project stakeholders including FAA, CDOT, FNL, and project team members.

p) Punchlists and Coordination: Dibble will prepare, manage, submit, and re-evaluate the punchlist. Dibble will ensure the punchlist are completed within project deadlines.

3) Post Construction Services (Lump Sum):

a) QA and QC Testing Summary Report: prepare the FAA QA and QC Testing Summary Report that collects and summarizes the quality assurance and quality control testing operations and results that took place during the construction project. The report shall meet the FAA NWMR DEN ADO guidelines and requirements. The report shall include, at a minimum:

- QA and QC Testing Summary
- CMP Testing Frequency
- Test Results of all FAA Specs (i.e. P-401)
- Project Details
- Special Inspections
- Job Mix Formulas
- Inspector's Reports

b) Demobilization and Site Clean-Up: coordinate between the Airport and Contractor on the demobilization and site clean-up at the completion of the project. Dibble shall perform an Airport site visit to assure the contractor left the project site in satisfactory condition.

c) Final Inspection: conduct the Final Completion Walk for the construction project and ensure that all punchlist items that were developed during the Substantial Completion Walks are corrected. The FAA, Airport, Construction Resident Engineer, and Construction Inspector shall all attend.

d) Final Construction Report and Coordination: coordinate, prepare, and submit the Final Construction Report in accordance with the FAA ADO guidelines and requirements. Electronic and hard copies will be provided to FNL and FAA. The report shall include, at a minimum:

- Summary of Project
- Summary of Change Orders
- Summary of Testing Reports (QA and QC)
- Project Fee Breakout
- Record Drawings
- DBE Summary
- Federal Labor Summary
- Before and After Construction Photos

e) Signage and Marking Plan: update the plan to reflect the newly constructed items including extended pavement geometrics, new pavement markings, and runway and taxiway signage and markers.

f) Record Drawings: develop and submit Final Record Drawings based on Contractor redlines and field changes issued during construction, including RFI's/ESI's. Electronic and hard copies will be provided to FNL and FAA.

Included in this effort is coordination with the Subconsultant Field Surveyor (Delta Field Services) to perform the final as-built survey that will be used to update the CAD design files and turned into FNL and FAA as the Record Drawings. Once the survey is obtained, Dibble will process the survey data and create new surfaces and project like work and As-Built the CAD files. This is a different survey than the FAA's AGIS survey item below.

g) Final FAA AGIS As-Built Survey and Imagery and Submittal to ADIP Database: this item will include the final As-Built Survey and new digital imagery of the complete project, in accordance with FAA AC 150/5300-16/17/18. This item will also include creating a new survey case on the FAA ADIP system. Coordinate with FAA agencies to develop the required FAA AGIS files and Statement of Work (SOW). The SOW, once reviewed and approved by the FAA, will be submitted to the FAA ADIP system. This item will also include the coordination efforts with FNL and FAA on the various AGIS forms that will be required to be reviewed, developed, and submitted to the various FAA agencies.

As-Built Survey: perform a full aeronautical survey meeting the requirements identified in the new AGIS Survey Project Planning Guide. This document has been included to this scope of work for reference.

New Digital Imagery: for this project subconsultant Ardurra will acquire new vertical stereo digital imagery at a physical image scale of 1"=2,500' of the obstruction surface areas and 1"=1,250' of the runway centerline. The aerial imagery will cover all the VG Airspace Analysis surfaces using an UltraCam Falcon prime (UCFp) camera during leaf-on conditions producing the following:

- Limited landmark feature planimetric mapping
- Color digital orthophotos with a 1.0' pixel resolution
- Identification and mapping of obstruction obstacles for all of the VG surfaces

h) ALP Update: amend and update the most recent (FAA Approved) ALP set to reflect the modifications made to the Airport at the completion of the project. The following sheets are anticipated to be updated based on the current 2023 ALP set, at a minimum:

- Sheet 2 – Airport Data
- Sheet 3 – Existing Airport Layout
- Sheet 4 – Future Airport Layout Plan
- Sheet 9 – Inner Approach (Runway 15)
- Sheet 10 – Inner Approach (Runway 33)
- Sheet 13 – Inner Approach (Future Runway 15)
- Sheet 14 – Inner Approach (Future Runway 33)

- Sheet 16 – Terminal Area Plan

Electronic and hard copies will be returned to the FAA and Airport once finalized, approved, and signed by the FAA.

i) Final Payment Application: coordinate the final inspected quantities with the contractor and coordinate prior to the submittal of final payment applications. We will assist the Airport in the draw-down of the federal grants for payment on the construction services.

Miscellaneous Items

4) Miscellaneous and Assumptions:

a) Subconsultants:

1. AGIS Survey and Digital Imagery – Ardurra
2. Record Drawing / CAD Survey – Delta Field Services
3. Quality Assurance Testing – Terracon
4. Electrical – CR Engineers

b) All record drawings are to be prepared in AutoCAD Civil 3D 2023.

c) The following number of trips are anticipated by the Construction Manager/Resident Engineer and Construction Inspector/Project Engineer for the Construction Phase:

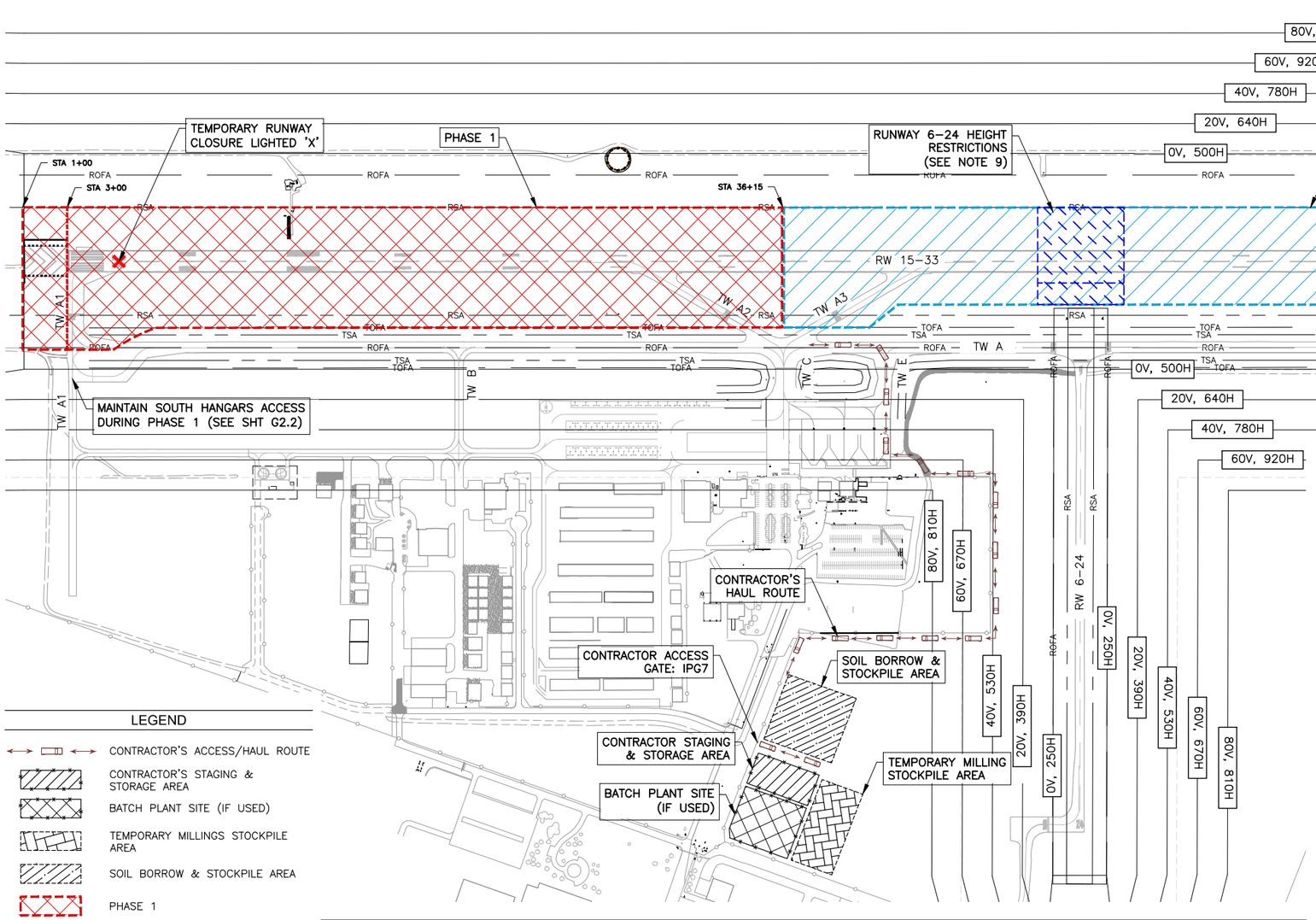
1. Pre-Construction Phase: 3 trips (pre- pre-construction kick-off, SRM, and the Pre-Construction).
2. Construction Coordination and Inspection Phase (29 weeks):
   i. Resident Engineer = 2 days every week, 10-hours a day
   ii. Construction Inspector = 5 days per week, 10-hours a day
   iii. Electrical Construction Inspection: reference scope of work provided by CR Engineers.
   iv. Direct costs including Lodging, Meals, and Mileage will be anticipated for each day/night that the inspector/resident engineer is on site. All applicable 2025 federal per diems, mileage rates, etc. will be applied.
3. Post Construction Phase: 2 trips

5) Exclusions To This Scope of Work:

a) Construction Staking.

b) Construction Quality Control Testing.

c) Contractor's jobsite safety and compliance with all OSHA requirements are excluded (Contractor's responsibility).



LEGEND

- CONTRACTOR'S ACCESS/HAUL ROUTE
- CONTRACTOR'S STAGING & STORAGE AREA
- BATCH PLANT SITE (IF USED)
- TEMPORARY MILLINGS STOCKPILE AREA
- SOIL BORROW & STOCKPILE AREA
- PHASE 1
- PHASE 2
- RW 6–24 HEIGHT RESTRICTIONS (PHASE 2, SEE NOTE 9)
- PHASE 3 (NOT SHOWN)
- PHASE 4 (NOT SHOWN)
- PHASE 5 (NOT SHOWN)
- RSA — RUNWAY SAFETY AREA
- TSA — TAXIWAY SAFETY AREA
- ROFA — RUNWAY OBJECT FREE AREA
- TOFA — TAXIWAY OBJECT FREE AREA
- BARRICADES (DET 1, SHT G2.7)
- RUNWAY CLOSURE LIGHTED 'X' (DET 2, SHT G2.7)

PHASING SUMMARY

	PHASE DURATION
PHASE 1 (STA 1+00 TO 36+15) RUNWAY 15–33 (SOUTH) STRUCTURAL & BLAST PAD PAVEMENT WIDENING, CONNECTOR TAXIWAY GEOMETRY, GRADING & DRAINAGE, ELECTRICAL IMPROVEMENTS, PAPI RELOCATION.	70 CALENDAR DAYS
PHASE 2 (STA 36+15 TO 90+00) RUNWAY 15–33 (NORTH) STRUCTURAL & BLAST PAD PAVEMENT WIDENING, CONNECTOR TAXIWAY GEOMETRY, GRADING & DRAINAGE, ELECTRICAL IMPROVEMENTS, PAPI ADJUSTMENT, PAVEMENT MARKINGS.	91 CALENDAR DAYS
STOP PERIOD: ASPHALT CURE PERIOD	30 CALENDAR DAYS
PHASE 3 (STA 3+00 TO 88+00)	30 CALENDAR NIGHTS – NIGHT WORK ONLY
RUNWAY SAW–CUT GROOVING (P–621)	(10:00 PM TO 5:00 AM MST)
PHASE 4 (STA 1+00 TO 90+00) EMULSIFIED SEAL COAT (P–608), TEMPORARY PAVEMENT MARKINGS (P–620)	5 CALENDAR NIGHTS – NIGHT WORK ONLY (10:00 PM TO 5:00 AM MST)
SUBSTANTIAL COMPLETION	196 CALENDAR DAYS
STOP PERIOD*: BETWEEN TEMPORARY AND PERMANENT MARKINGS	24 CALENDAR DAYS *PUNCHLIST WORK AUTHORIZED
PHASE 5 (STA 1+00 TO 90+00) RUNWAY 15–33 PERMANENT PAVEMENT MARKINGS (P–620)	7 CALENDAR NIGHTS – NIGHT WORK ONLY (10:00 PM TO 5:00 AM MST)
FINAL COMPLETION – PROJECT TOTAL:	203 CALENDAR DAYS

TENTATIVE PROJECT SCHEDULE (DEPENDENT ON FAA GRANT FUNDING)

ANTICIPATED PROJECT AWARD: SEPT 2025
ANTICIPATED CONSTRUCTION START: MAY 2026

PROJECT PHASING NOTES

1. EXACT LOCATIONS OF BARRICADE PLACEMENT AND PAVEMENT MARKING OBLITERATION MAY BE ADJUSTED AT THE DISCRETION OF AIRPORT STAFF TO ACCOMMODATE SPECIFIC AIRPORT OPERATIONAL NEEDS.
2. AT THE START OF PHASES 1 AND 2, CONTRACTOR SHALL REMOVE IDENTIFIED TAXIWAY CENTERLINE MARKINGS LEADING FROM OPEN TAXIWAYS INTO CLOSED AIRFIELD SURFACES. OBLITERATED MARKINGS SHALL BE RE–APPLIED AT THE END OF EACH PHASE AT 100% APPLICATION RATE WITH REFLECTIVE MEDIA.
3. DURING PHASES 1 AND 2, ALL RUNWAY LIGHTS AND SIGNS LOCATED OUTSIDE OF THE OPERATIONAL PORTION OF RUNWAY 15–33 SHALL BE DISCONNECTED AND/OR COVERED TO PREVENT CONFLICTING SIGNALS AND LIGHT LEAKAGE.
4. TEMPORARY RUNWAY THRESHOLD/END LIGHTS SHALL MEET THE REQUIREMENTS IN FAA AC 150/5345–50.
5. CONTRACTOR SHALL REMOVE ALL RUNWAY 15–33 AIMING POINT AND TOUCHDOWN ZONE MARKINGS DURING MOBILIZATION OF TEMPORARY RUNWAY 15–33 CLOSURE AT THE START OF PHASE 1. SEE SHTS D1.1, 12.A, D1.4, & D1.5.
6. CONTRACTOR SHALL REMOVAL RUNWAY CENTERLINE MARKINGS BETWEEN STA 30+10 AND 41+30 AT START OF PHASE 1 AND PRIOR TO APPLICATION OF TEMPORARY THRESHOLD AND CHEVRON MARKINGS. SEE SHEETS G2.2 AND G2.3.
7. APPLICATION OF PERMANENT PAVEMENT MARKINGS WILL OCCUR DURING PHASE 2, FOR THE ENTIRE RUNWAY LENGTH. RUNWAY PAVEMENT MARKINGS BETWEEN STA 3+00 AND 36+15 SHALL BE APPLIED AT NIGHT DURING THE RUNWAY 15–33 NIGHTLY CLOSURE. A SECONDARY APPLICATION OF PERMANENT PAVEMENT MARKINGS WILL OCCUR DURING PHASE 5, FOLLOWING THE COMPLETION OF SAW–CUT GROOVING AND SEAL COAT.
8. DURING PHASES 1 AND 2, RUNWAY DISTANCE REMAINING SIGNS LOCATED WITHIN THE OPERATIONAL PORTION OF RUNWAY 15–33 SHALL ONLY BROADCAST DISTANCES FOR DEPARTING AIRCRAFT. RDR SIGN PANELS FACING LANDING TRAFFIC SHALL BE COVERED TO PREVENT CONFLICTING SIGNALS AND LIGHT LEAKAGE.
9. EQUIPMENT HEIGHT LIMITATIONS: IF EQUIPMENT EXCEEDS THE HEIGHTS WITHIN THE FOLLOWING STATIONS AND OFFSETS, WORK MUST BE COMPLETED AT NIGHT BETWEEN 10:00 PM AND 5:00 AM MST WHEN RUNWAY 6–24 IS CLOSED (PHASE 2).
   STA 48+00 – 52+00, 100' RT: 18'
   STA 48+00 – 52+00, 200' RT: 13'
10. UNLESS OTHERWISE NOTED, CONSTRUCTION PHASING ITEMS ARE CONSIDERED INCIDENTAL TO PROJECT MOBILIZATION, FEDERAL TECHNICAL SPECIFICATION ITEM C–105.
11. REMOVAL OF PAVEMENT MARKINGS ARE QUANTIFIED IN LINE ITEM 20. TEMPORARY PAVEMENT MARKINGS FOR PHASING ARE QUANTIFIED IN LINE ITEM 34.

0V, 500H — THE 14 CFR PART 77 SAFE, EFFICIENT USE, AND PRESERVATION OF NAVIGABLE AIRSPACE ESTABLISHES SEVERAL IMAGINARY SURFACES THAT ARE USED AS A GUIDE TO PROVIDE A SAFE AND UNOBSTRUCTED OPERATING ENVIRONMENT FOR AVIATION. THE CFR PART 77 CONTOURS SHOWN ARE FOR INFORMATION PURPOSES ONLY AND DEPICT THE MAXIMUM ALLOWABLE VERTICAL HEIGHT (IN FEET, LABEL V) OF CONSTRUCTION EQUIPMENT ABOVE RUNWAY CENTERLINE ELEVATIONS AND HORIZONTAL DISTANCE (IN FEET, LABEL H) FROM THE RUNWAY CENTERLINES FOR RUNWAY 15–33 AND RUNWAY 6–24. THE CONTRACTOR'S EQUIPMENT SHALL REMAIN BELOW ALL CFR PART 77 SURFACES AT ALL TIMES, UNLESS NOTED OTHERWISE BY THE ENGINEER.

COLORADO 811 — CALL BEFORE YOU DIG. IT'S THE LAW.

REV	DATE	DESCRIPTION

DIBBLE

PRELIMINARY SUBMITTAL
90%
NOT FOR CONSTRUCTION OR RECORDING

DATE:	07.11.24
DESIGNED BY:	TCW
DRAWN BY:	DTW
REVIEWED BY:	KLS
FILE NAME:	19180_06-G2_X-PHAS

NORTHERN COLORADO REGIONAL AIRPORT

NORTHERN COLORADO REGIONAL AIRPORT
RUNWAY 15-33 WIDENING

OVERALL PHASING & ACCESS PLAN

G2.1

SHEET # 9 OF 126

K:\2019\19180.06 FNL RW 15-33 WIDENING (DESIGN)\CAD\19180_06-G2_X-PHAS.DWG Jul 11, 2024 10:20 AM

NORTHERN COLORADO REGIONAL AIRPORT
RUNWAY 15-33 WIDENING
100% ENGINEER'S OPINION OF PROBABLE CONST. COST

LINE No.	ITEM No.	DESCRIPTION	APPROX. QTY.	UNIT	UNIT PRICE	AMOUNT
CIVIL						
1	C-100-14.1	Contractor Quality Control Program (CQCP)	1	LS	$300,000.00	$300,000.00
2	C-102-5.1	Temporary Air and Water Pollution, Soil Erosion, and Siltation Control	1	LS	$150,000.00	$150,000.00
3	C-105-6.1	Mobilization (4% of Total Bid Maximum)	1	LS	$625,000.00	$625,000.00
4	P-101-5.1	Sawcut AC Pavement (2-inch Depth)	18,479	LF	$2.00	$36,958.00
5	P-101-5.2	Sawcut Blast Pad Pavement (Full Depth, 4" +/-)	792	LF	$3.00	$2,376.00
6	P-101-5.3	Sawcut Runway Pavement (Full Depth Varies, 13"-26" AC)	17,026	LF	$10.00	$170,260.00
7	P-101-5.4	Sawcut Taxiway Pavement (Full Depth Varies, 20"-22" AC +/-)	1,180	LF	$15.00	$17,700.00
8	P-101-5.5	Sawcut Taxiway Pavement (Full Depth, 6" AC / 3" PCCP +/-)	285	LF	$15.00	$4,275.00
9	P-101-5.6	Sawcut Taxiway Pavement (Full Depth, 6" AC / 9" PCCP +/-)	443	LF	$18.00	$7,974.00
10	P-101-5.7	Sawcut Taxiway Pavement (Full Depth, 6" AC / 16" PCCP +/-)	935	LF	$20.00	$18,700.00
11	P-101-5.8	Mill AC Pavement (2-inch Depth)	6,159	SY	$10.00	$61,590.00
12	P-101-5.9	Remove Blast Pad Pavement (Full Depth, 4" +/-)	88	SY	$50.00	$4,400.00
13	P-101-5.10	Remove Runway Pavement (Full Depth Varies, 13"-26" AC)	2,027	SY	$18.00	$36,486.00
14	P-101-5.11	Remove Taxiway Pavement (Full Depth Varies, 20"-22" AC +/-)	4,153	SY	$18.00	$74,754.00
15	P-101-5.12	Remove Taxiway Pavement (Full Depth, 6" AC / 3" PCCP +/-)	986	SY	$18.00	$17,748.00
16	P-101-5.13	Remove Taxiway Pavement (Full Depth, 6" AC / 9" PCCP +/-)	432	SY	$20.00	$8,640.00
17	P-101-5.14	Remove Taxiway Pavement (Full Depth, 6" AC / 16" PCCP +/-)	2,873	SY	$30.00	$86,190.00
18	P-101-5.15	Remove Edge Drain	14,196	LF	$10.00	$141,960.00
19	P-101-5.16	Obliterate Pavement Markings	40,074	SF	$5.00	$200,370.00
20	P-152-4.1	Unclassified Excavation	67,976	CY	$10.00	$679,760.00
21	P-152-4.2	Over-Excavation of Unsuitable Materials and Replacement with Suitable Materials	3,509	CY	$35.00	$122,815.00
22	P-154-5.1	Subbase Course (19-inch Depth)	52,629	SY	$28.00	$1,473,612.00
23	P-154-5.2	Separation Geotextile Fabric	52,629	SY	$2.50	$131,572.50
24	P-209-5.1	Crushed Aggregate Base Course (6-inch Depth)	52,629	SY	$17.00	$894,693.00
25	P-209-5.2	Crushed Aggregate Base Course (14-inch Depth)	2,740	SY	$40.00	$109,600.00
26	P-209-5.3	Crushed Aggregate Base Course (27-inch Depth)	194	SY	$55.00	$10,670.00
27	P-401-8.1	AC Surface Course	14,764	TON	$165.00	$2,436,060.00
28	P-403-8.1	AC Stabilized Base Course	20,697	TON	$150.00	$3,104,550.00
29	P-603-5.1	Emulsified Asphalt Tack Coat	17,285	GAL	$4.00	$69,140.00
30	P-608-8.1	Emulsified Asphalt Seal Coat	168,142	SY	$2.00	$336,284.00
31	P-620-5.1	Temporary Pavement Markings	7,787	SF	$0.75	$5,840.25
32	P-620-5.2	Permanent Pavement Markings	275,932	SF	$1.25	$344,915.00
33	P-621-5.1	Grooving	47,230	SY	$3.00	$141,690.00
34	D-705-5.1	6-Inch Perforated PVC Underdrain	17,485	LF	$25.00	$437,125.00
35	D-705-5.2	6-Inch Underdrain Cleanouts	55	EA	$1,800.00	$99,000.00
36	D-705-5.3	6-inch PVC Drain Pipe	1,168	LF	$28.00	$32,704.00
37	D-705-5.4	Edge Drain Discharge Grate	5	EA	$350.00	$1,750.00
38	T-901-5.1	Seeding with Hydromulch	41	AC	$2,500.00	$101,250.00
39	SP-70.01	Drainage Rock (6-inch Depth)	52,629	SY	$10.00	$526,290.00
40	SP-70.02	Underground Utility Adjustment	500	LF	$60.00	$30,000.00
41	SP-70.03	Connect New Storm Drain Pipe to Existing Structure	1	EA	$1,500.00	$1,500.00
					Civil Subtotal	$13,056,201.75

NORTHERN COLORADO REGIONAL AIRPORT
RUNWAY 15-33 WIDENING
100% ENGINEER'S OPINION OF PROBABLE CONST. COST

LINE No.	ITEM No.	DESCRIPTION	APPROX. QTY.	UNIT	UNIT PRICE	AMOUNT
ELECTRICAL						
42	L-100-5.1	Remove and Salvage Existing Runway Edge Light and Isolation Transformer, Remove Base Can	79	EA	$935.00	$73,865.00
43	L-100-5.2	Remove and Salvage Existing In-Pavement Runway Edge/Threshold Light and Isolation Transformer, Remove Base Can	13	EA	$495.00	$6,435.00
44	L-100-5.3	Remove and Salvage Existing In-Pavement Runway Edge/Threshold Light Red/Green and Isolation Transformer, Base Can to Remain	8	EA	$275.00	$2,200.00
45	L-100-5.4	Remove and Salvage Existing Taxiway Edge Light and Isolation Transformer, Remove Base Can	45	EA	$495.00	$22,275.00
46	L-100-5.5	Excavate and Remove Existing Conduit and Conductor	21,287	LF	$9.35	$199,033.45
47	L-100-5.6	Remove Existing Conductor, Conduit to Remain	7,294	LF	$4.95	$36,105.30
48	L-100-5.7	Remove Airfield Guidance Sign and Concrete Sign Base	18	EA	$1,320.00	$23,760.00
49	L-100-5.8	Excavate and Remove Existing Pull Box/Junction Can	18	EA	$495.00	$8,910.00
50	L-100-5.9	Remove and Salvage Existing Pavement Sensor and Cable Back to Existing Junction Can	4	EA	$605.00	$2,420.00
51	L-100-5.10	Remove Existing Counterpoise and Ground Rods	19,000	LF	$1.10	$20,900.00
52	L-100-5.11	Disconnect and Remove Existing 30KW Runway CCR and associated feeders and control cables. Coordinate with the Airport for storing in Vault for Use as Spare	1	LS	$880.00	$880.00
53	L-100-5.12	Remove Existing L-824 Conductors, Conduit to Remain	100	LF	$1.10	$110.00
54	L-108-5.1	New 1/C, #8 5KV L-824, Type "C" Airfield Lighting Cable	21,712	LF	$4.95	$107,474.40
55	L-108-5.2	New 2/C, #8 5KV L-824, Type "C" Airfield Lighting Cable	4,225	LF	$6.05	$25,561.25
56	L-108-5.3	2-#8, #8 Ground 5KV L-824, Type "C" Airfield Lighting Cable	5,715	LF	$9.74	$55,635.53
57	L-108-5.4	2-#10, #10 Ground In 2" Conduit (PAPI 33)	430	LF	$40.74	$17,519.92
58	L-109-7.1	Install New L-829 15KW 5-Step Constant Current Regulator, Reconnect Existing #4 Grounding Conductor (Tested Complete)	1	EA	$23,100.00	$23,100.00
59	L-109-7.2	Install Associated feeders 2-#4 THWN Copper Conductors and #6 Ground in 1 1/2" LFMC. New 2/C #8-5KV L-824, Type "C" Airfield Lighting Cable. Reconnect New LFMC and Existing Control Cable to new CCR. Install New 100 A Breaker in Existing Panel PP1.	1	LS	$5,500.00	$5,500.00
60	L-110-5.1	1-2" Conduit Direct Buried	21,639	LF	$38.50	$833,101.50
61	L-110-5.2	1-2" Conduit Concrete Encased	2,775	LF	$55.00	$152,625.00
62	L-110-5.3	1-3" Conduit Direct Buried (Per Local Utility Requirements)	135	LF	$49.50	$6,682.50
63	L-110-5.4	4-2" Conduit Concrete Encased	255	LF	$88.00	$22,440.00
64	L-110-5.5	2-2" Conduit Concrete Encased	80	LF	$71.50	$5,720.00
65	L-110-5.6	2-2" Conduit Directional Bore	85	LF	$93.50	$7,947.50
66	L-115-5.1	Install New 2'x3'x3' Handhole With Aircraft-Rated Lid Spring Assisted Opening	6	EA	$8,800.00	$52,800.00
67	L-125-5.1	Install New L-862(L) LED Elevated Runway Edge Light White/White with 24" Stem and Isolation Transformer on New L-867 Base Can	43	EA	$1,650.00	$70,950.00
68	L-125-5.2	Install New L-862(L) LED Elevated Runway Edge Light Yellow/White with 24" Stem and Isolation Transformer on New L-867 Base Can	42	EA	$1,650.00	$69,300.00
69	L-125-5.3	Install New L-850C(L) LED In-Pavement Runway Edge Light White/White with Arctic Kit, Snow Plow Ring and Isolation Transformer on New L-868 Base Can	1	EA	$4,180.00	$4,180.00
70	L-125-5.4	Install New L-862E(L) LED Elevated Runway Threshold / End Light Red/Green with 24" Stem and Isolation Transformer on New L-867 Base Can	16	EA	$1,650.00	$26,400.00
71	L-125-5.5	Install New L-861T Incandescent Taxiway Edge Light And Isolation Transformer on New L-867 Base Can.	22	EA	$1,650.00	$36,300.00
72	L-125-5.6	Install Salvaged L-861T Elevated Taxiway Light with 24" Stem and Isolation Transformer on New L-867 Base Can	45	EA	$715.00	$32,175.00
73	L-125-5.7	Install New L-858(L) LED Size 1, 2-Module Airfield Guidance Sign and Isolation Transformer on New Concrete Sign Base	9	EA	$6,600.00	$59,400.00
74	L-125-5.8	Install New L-858B(L) LED Size 5, 1-Module Runway Distance Remaining Sign and Isolation Transformer on New Concrete Sign Base	7	EA	$5,940.00	$41,580.00
75	L-125-5.9	New L-867B (12" DIA) Junction Can with Blank Steel Cover	19	EA	$990.00	$18,810.00
76	L-125-5.10	Install New Steel Blank Cover on Existing Base Can With New Bolts.	8	EA	$220.00	$1,760.00

NORTHERN COLORADO REGIONAL AIRPORT
RUNWAY 15-33 WIDENING
100% ENGINEER'S OPINION OF PROBABLE CONST. COST

LINE No.	ITEM No.	DESCRIPTION	APPROX. QTY.	UNIT	UNIT PRICE	AMOUNT
ELECTRICAL						
77	L-125-5.11	Install New Pavement Sensor and Sub-Surface Temperature Probe (Includes Kerf Cut and Cable Installation from Existing Junction Can)	4	LS	$40,425.00	$161,700.00
78	L-125-5.12	Install New L-858(L) LED Size 1, 3 Module Airfield Guidance Sign and Isolation Transformer on New Concrete Sign Base	7	EA	$7,150.00	$50,050.00
79	L-125-5.13	Install New L-858(L) LED Size 1, 4 Module Airfield Guidance Sign and Isolation Transformer on New Concrete Sign Base.	1	EA	$7,920.00	$7,920.00
80	L-125-5.14	New L-880A(L) LED PAPI 33 Units (4-Box) On New Concrete Foundations	1	EA	$30,800.00	$30,800.00
81	L-125-5.15	New L-880A(L) LED PAPI 15 Units (4-Box) with One Light box on New Concrete Foundation, and 3 Light Boxes on Existing Concrete Foundations	1	EA	$30,800.00	$30,800.00
82	L-125-5.16	Temporary Airfield Threshold Lighting (Runway 15/33) and Cable Jumpers	1	EA	$25,850.00	$25,850.00
					Electrical Subtotal	$2,380,977.00

CONSTRUCTION SUBTOTAL	**$15,437,178.75**
Construction Management Fee	$1,290,000.00
FNL Admin and FAA Flight Check Fee	$150,000.00
CONSTRUCTION PROJECT TOTAL	**$16,877,178.75**

Firm: **DIBBLE**
On-Call Engineering
Project: **RW 15-33 Widening CA**
Construction Phase Services
Northern CO Regional Airport
Date: 3/19/2025

NORTHERN COLORADO REGIONAL AIRPORT

DIBBLE

Contract Number: TBD
Project Number: TBD
Task Number: 1
Amendment Number: N/A
FAA Number: 3-08-0023-047-2025
CDOT Number: N/A

Summary			Dibble	Subs

A. Preconstruction Phase Services

		Fee	Type		
1	Dibble (Civil and Construction Management)	$63,507.40	Lump Sum	$63,507.40	
	Preconstruction Phase Subtotal	$63,507.40		$63,507.40	$0.00

B. Construction Coordination and Inspection Phase Services

		Fee	Type		
1	Dibble (Civil and Construction Management)	$643,589.53	Cost + Fixed Fee	$643,589.53	
2	Terracon (Quality Assurance Testing)	$263,130.00	T&M		$263,130.00
3	CR Engineers (Electrical)	$181,947.15	T&M		$181,947.15
	Construction Coordination and Inspection Phase Subtotal	$1,088,666.68		$643,589.53	$445,077.15

C. Post Construction Phase Services

		Fee	Type		
1	Dibble (Civil and Construction Management)	$70,413.90	Lump Sum	$70,413.90	
2	Ardurra (FAA AGIS As-Built Survey)	$55,697.00	Lump Sum		$55,697.00
3	Delta Field Services (Record Drawing/CAD Survey)	$9,500.00	Lump Sum		$9,500.00
	Post Construction Phase Subtotal	$135,610.90		$70,413.90	$65,197.00

	TOTAL	Dibble	Subconsultants
Total	***$1,287,784.98***	***$777,510.83***	***$510,274.15***

Firm:	DIBBLE	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**RW 15-33 Widening CA**	Task Number:	1
	Construction Phase Services	Amendment Number:	N/A
	Northern CO Regional Airport	FAA Number:	3-08-0023-047-2025
Date:	3/19/2025	CDOT Number:	N/A

PRECONSTRUCTION PHASE SERVICES SUMMARY

	Classification	Total Hours	Billing Rates	Total Costs
1	Principal Engineer	0	$267.81	$0.00
2	Senior Project Manager	84	$247.23	$20,767.32
3	Construction Resident Engineer	64	$247.33	$15,829.12
4	Senior Planner	0	$226.62	$0.00
5	Senior Engineer	0	$226.62	$0.00
6	QA/QC Manager	0	$267.81	$0.00
7	Construction Inspector/Engineer	108	$226.62	$24,474.96
8	Senior Designer	0	$159.65	$0.00
9	Admin Assistant	24	$92.75	$2,226.00
	Totals:	**280**		**$63,297.40**

PRECONSTRUCTION PHASE SERVICES DIRECT COSTS

	Item	Cost	Type of Compensation
1	Lodging	$0.00	Direct Cost
2	Travel	$210.00	Direct Cost
3	Meals	$0.00	Direct Cost

Sub-Total for Direct Costs..... **$210.00**

PRECONSTRUCTION PHASE SERVICES SUBCONSULTANTS

	Firm	Cost	Type of Compensation
1		$0.00	

Sub-Total for Subconsultants: **$0.00**

PRECONSTRUCTION PHASE SERVICES TOTAL FEE

TOTAL FEE..... **$63,507.40**

Firm:	DIBBLE	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**RW 15-33 Widening CA**	Task Number:	1
	Construction Phase Services	Amendment Number:	N/A
	Northern CO Regional Airport	FAA Number:	3-08-0023-047-2025
Date:	3/19/2025	CDOT Number:	N/A

PRECONSTRUCTION PHASE SERVICES SUMMARY

TASK	PRINCIPAL ENGINEER	SENIOR PROJECT MANAGER	CONSTRUCTION RESIDENT ENGINEER	SENIOR PLANNER	SENIOR ENGINEER	QA/QA MANAGER	CONSTRUCTION INSPECTOR/ ENGINEER	SENIOR DESIGNER	ADMIN ASSISTANT	TOTAL HOURS BY TASK
1 Preconstruction Phase Services										
1a Preconstruction Management & Administration		60	20				16		24	120
1b Preconstuction Conference		8	8				8			24
1c Safety Risk Management Meeting (SRM)		8	8				8			24
1d FAA-ATO Strategic Event Coordination (SEC) Form		4					4			8
1e Construction Management Plan (CMP)		2	8				24			34
1f Precon Conference Submittal Reviews and Coordination		2	16				32			50
1g Construction Equipment Submittal to OE/AAA			4				16			20
TOTAL HOURS BY CLASSIFICATION	0	84	64	0	0	0	108	0	24	280

Firm:	DIBBLE	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**RW 15-33 Widening CA**	Task Number:	1
	Construction Phase Services	Amendment Number:	N/A
	Northern CO Regional Airport	FAA Number:	3-08-0023-047-2025
Date:	3/19/2025	CDOT Number:	N/A

PRECONSTRUCTION PHASE SERVICES DIRECT COSTS

1. Lodging				
a.	0 Trips		$140.00 /Day (2025 Federal Per Diem)	$0
2. Travel				
a.	2 Trips	150 Miles/Trip	$0.700 /mile (2025 Federal Mileage Rate)	$210
3. Meals				
a.	0 Trips	2 staff	$80.00 /Day (2025 Federal Per Diem)	$0
			PRECONSTRUCTION PHASE TOTAL	**$210.00**

Firm:	DIBBLE	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**RW 15-33 Widening CA**	Task Number:	1
	Construction Phase Services	Amendment Number:	N/A
	Northern CO Regional Airport	FAA Number:	3-08-0023-047-2025
Date:	3/19/2025	CDOT Number:	N/A

CONSTRUCTION COORDINATION AND INSPECTION SERVICES SUMMARY

	Classification	Total Hours	CPFF Rate	CPFF Cost	
1	Principal Engineer	0	$232.87	$0.00	
2	Senior Project Manager	242	$214.98	$52,025.16	
3	Construction Resident Engineer	559	$215.07	$120,224.13	
4	Senior Planner	0	$197.06	$0.00	
5	Senior Engineer	0	$197.06	$0.00	
6	QA/QC Manager	0	$232.87	$0.00	
7	Construction Inspector	1,835	$197.06	$361,605.10	
8	Senior Designer	18	$138.83	$2,498.94	
9	Admin Assistant	48	$80.65	$3,871.20	

CPFF Subtotals:	**2,702**		**$540,224.53**

Negotiated Fixed Fee:		**$80,000.00**

Total CPFF + Fixed Fee	**$620,224.53**

CONSTRUCTION COORDINATION AND INSPECTION SERVICES DIRECT COSTS

	Item	Cost	Type of Compensation
1	Lodging	$0.00	Direct Costs
2	Travel	$19,845.00	Direct Costs
3	Meals	$3,520.00	Direct Costs

Sub-Total for Direct Costs..... **$23,365.00**

CONSTRUCTION COORDINATION AND INSPECTION SERVICES SUBCONSULTANTS

	Firm	Cost	Type of Compensation
1	Terracon (Quality Assurance Testing)	$263,130.00	T&M
2	CR Engineers (Electrical)	$181,947.15	T&M

Sub-Total for Subconsultants: **$445,077.15**

CONSTRUCTION COORDINATION AND INSPECTION SERVICES TOTAL FEE

TOTAL FEE..... **$1,088,666.68**

Firm:	DIBBLE	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**RW 15-33 Widening CA**	Task Number:	1
	Construction Phase Services	Amendment Number:	N/A
	Northern CO Regional Airport	FAA Number:	3-08-0023-047-2025
Date:	3/19/2025	CDOT Number:	N/A

CONSTRUCTION COORDINATION AND INSPECTION SERVICES SUMMARY

TASK	PRINCIPAL ENGINEER	SENIOR PROJECT MANAGER	CONSTRUCTION RESIDENT ENGINEER	SENIOR PLANNER	SENIOR ENGINEER	QA/QA MANAGER	CONSTRUCTION INSPECTOR	SENIOR DESIGNER	ADMIN ASSISTANT	TOTAL HOURS BY TASK
2 Construction Coordination and Inspection										
2a Construction Management and Administration		60	24						48	132
2b Site Visits and Observations		145	290				1450			1,885
2c Weekly Construction and Safety Meetings		29	29				29			87
2d Weekly Certified Payroll and Davis Bacon Review			12				40			52
2e Contractor Employee Interviews							20			20
2f Weekly FAA Reports (5370-1)			10				30			40
2g Weekly Quantity Calculations			10				30			40
2h Monthly Payment Application Coordination and Review			14				14			28
2i Change Order Review and Coordination			16				16			32
2j Material Shop Drawing Review and Coordination			24				80			104
2k RFI Review and Coordination			24				30			54
2l ESI Review and Coordination			24				24	18		66
2m DBE Compliance and Coordination			8				24			32
2n QA/QC Testing Coordination and Review			60				24			84
2o Substantial Completion Inspections		8	8				8			24
2p Punchlist(s) and Coordination(s)			6				16			22
TOTAL HOURS BY CLASSIFICATION	0	242	559	0	0	0	1,835	18	48	2,702

Firm:	DIBBLE	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**RW 15-33 Widening CA**	Task Number:	1
	Construction Phase Services	Amendment Number:	N/A
	Northern CO Regional Airport	FAA Number:	3-08-0023-047-2025
Date:	3/19/2025	CDOT Number:	N/A

CONSTRUCTION COORDINATION AND INSPECTION SERVICES DIRECT COSTS

1. Lodging					
a.	0 Trips (Construction Manager)			$140.00 /Day (2025 Federal Per Diem)	$0
b.	0 Trips (Construction Inspector)			$140.00 /Day (2025 Federal Per Diem)	$0
2. Travel					
a.	15 Trips (Sr. Project Manager)	150	Miles/Trip	$0.700 /mile (2025 Federal Mileage Rate)	$1,575
b.	29 Trips (Construction Manager)	150	Miles/Trip	$0.700 /mile (2025 Federal Mileage Rate)	$3,045
c.	145 Trips (Construction Inspector)	150	Miles/Trip	$0.700 /mile (2025 Federal Mileage Rate)	$15,225
3. Meals					
a.	15 Trips (Construction Manager)			$80.00 /Day (2025 Federal Per Diem)	$1,200
b.	29 Trips (Construction Inspector)			$80.00 /Day (2025 Federal Per Diem)	$2,320
				CONSTRUCTION PHASE TOTAL	**$23,365.00**

Firm:	DIBBLE	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**RW 15-33 Widening CA**	Task Number:	1
	Construction Phase Services	Amendment Number:	N/A
	Northern CO Regional Airport	FAA Number:	3-08-0023-047-2025
Date:	3/19/2025	CDOT Number:	N/A

POST CONSTRUCTION SERVICES SUMMARY

	Classification	Total Hours	Billing Rates	Total Costs
1	Principal Engineer	0	$267.81	$0.00
2	Senior Project Manager	52	$247.23	$12,855.96
3	Construction Resident Engineer	4	$247.33	$989.32
4	Senior Planner	24	$226.62	$5,438.88
5	Senior Engineer	0	$226.62	$0.00
6	QA/QC Manager	0	$267.81	$0.00
7	Project Engineer	158	$185.43	$29,297.94
8	Senior Designer	132	$159.65	$21,073.80
9	Admin Assistant	0	$92.75	$0.00
	Totals:	**370**		**$69,655.90**

POST CONSTRUCTION SERVICES DIRECT COSTS

	Item	Cost	Type of Compensation
1	Lodging	$0.00	Direct Cost
2	Travel	$210.00	Direct Cost
3	Meals	$0.00	Direct Cost
4	Printing	$548.00	Direct Cost
	Sub-Total for Direct Costs		**$758.00**

POST CONSTRUCTION SERVICES SUBCONSULTANTS

	Firm	Cost	Type of Compensation
1	Ardurra (FAA AGIS As-Built Survey)	$55,697.00	Lump Sum
2	Delta Field Services (Record Drawing/CAD Survey)	$9,500.00	T&M
	Sub-Total for Subconsultants:		**$65,197.00**

POST CONSTRUCTION SERVICES TOTAL FEE

TOTAL FEE	**$135,610.90**

Firm:	DIBBLE	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**RW 15-33 Widening CA**	Task Number:	1
	Construction Phase Services	Amendment Number:	N/A
	Northern CO Regional Airport	FAA Number:	3-08-0023-047-2025
Date:	3/19/2025	CDOT Number:	N/A

POST CONSTRUCTION SERVICES SUMMARY

TASK	PRINCIPAL ENGINEER	SENIOR PROJECT MANAGER	CONSTRUCTION RESIDENT ENGINEER	SENIOR PLANNER	SENIOR ENGINEER	QA/QA MANAGER	PROJECT ENGINEER	SENIOR DESIGNER	ADMIN ASSISTANT	TOTAL HOURS BY TASK
3 Post Construction										
3a QA and QC Testing Summary Report		8					32			40
3b Demobilization and Site Clean-Up		8					8			16
3c Final Inspection		4	4				4			12
3d Final Construction Report and Coordination		12					48			60
3e Signage and Marking Plan		4					8	24		36
3f Record Drawings		8					30	60		98
3g Final FAA AGIS As-Built Survey and Submittal		4					24	24		52
3h ALP Update				24				24		48
3i Final Payment Application		4					4			8
TOTAL HOURS BY CLASSIFICATION	0	52	4	24	0	0	158	132	0	370

Firm:	DIBBLE	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**RW 15-33 Widening CA**	Task Number:	1
	Construction Phase Services	Amendment Number:	N/A
	Northern CO Regional Airport	FAA Number:	3-08-0023-047-2025
Date:	3/19/2025	CDOT Number:	N/A

POST CONSTRUCTION SERVICES DIRECT COSTS

1. Lodging

a.	0 Trips			$140.00 /Day (2025 Federal Per Diem)	$0

2. Travel

a.	2 Trips	150 Miles/Trip		$0.700 /mile (2025 Federal Mileage Rate)	$210

3. Meals

a.	0 Trips	2 staff		$80.00 /Day (2025 Federal Per Diem)	$0.00

4. Printing (Record Drawings, Final Construction Report, ALP, Signage and Marking Plans)

a.	0	Submittal of Record Drawings	0 sheets =	0 Sheets @	$6.00	/sheet	$0
b.	1	Submittal of ALP (2 Copies Full-Size Bond Plans)	25 sheets =	25 Sheets @	$10.00	/sheet	$500
c.	1	Submittal of Signage and Marking (1 Copy Full-Size Bond Plans)	8 sheets =	8 Sheets @	$6.00	/sheet	$48
d.	0	Submittal of Final Constuction Report	@	550 Pages @	$0.60	/page	$0

POST CONSTRUCTION PHASE TOTAL $758.00

1901 Sharp Point Dr., Ste. C
Fort Collins, Colorado 80524
P (970) 484-0359
Terracon.com

March 12, 2025

Dibble & Associates Consulting Engineers, Inc.
2696 South Colorado Boulevard, Suite 330
Suite 330
Denver, Colorado 80222

Attn: Mr. Jared Bass, P.E.
jared.bass@dibblecorp.com

Re: Proposal for Materials Testing Services
Northern Colorado Regional Airport (FNL) – Runway 15-33 Widening
4900 Earhart Road
Loveland, Colorado 80538
Terracon Proposal No. P20251016
FAA Project No. 3-08-0023-043-2023 (Design)
Dibble Project No. 1019180.06
FNL Project No. APFAA43

Dear Mr. Bass:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to provide Quality Assurance (QA) construction materials testing services for the Northern Colorado Regional Airport (FNL) – Runway 15-33 Widening project. Our proposal includes an outline of the project information, our proposed scope of services, estimated quantities, unit rates, and a total estimated fee for our services.

1.0 Capabilities And Experience

Construction Materials Testing

Our team of inspectors and technicians are experienced with providing materials testing, special inspections and/or observations of concrete, soils, aggregate, masonry, structural steel, foundations, fireproofing, firestopping, and asphalt pavement in the local area and are familiar with the recognized requirements.

Laboratory Capabilities

- **Accredited by AASHTO Materials Reference Laboratory (AMRL)**
- **Inspected by Concrete and Cement Reference Laboratory (CCRL)**

Our Fort Collins, CO laboratory is accredited by AASHTO Re:source which is recognized by ASTM E329 Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection. The scope of accreditation includes the field of Soils, Aggregates, Portland Cement Concrete, and Hot Mix Asphalt. As a requirement of accreditation, we regularly participate in the Proficiency Sample Programs of both AASHTO Re:source and the Concrete and Cement Reference Laboratory (CCRL). Our office includes a fully equipped laboratory and employs engineering technicians and special inspectors certified by the American Concrete Institute (ACI), National Institute for Certification in Engineering Technologies (NICET), American Welding Society (AWS), and the International Code Council (ICC). We

provide a rigorous internal training program where our staff are evaluated in specific field and laboratory test procedures by internal Terracon auditors and external agencies.

Compass | Materials Data Delivery

Traditional methods of reporting and accessing results of your project's inspections, testing, and observations are no longer sufficient for today's construction projects. With a large number of reports generated on a single project, you now have a solution to quickly find and view specific data to make timely, informed decisions for your project. Terracon offers you the ability to view and interact with your testing data in a new way and is committed to using innovative techniques to deliver quality projects. Construction data is viewed by geographic location in relation to your project drawings as part of our seamless project delivery system.

Advantages to Terracon Compass:

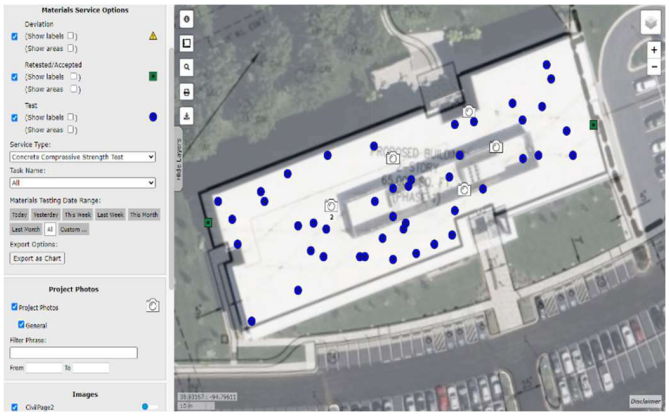
- Mapped Testing Data on Your Dashboard
- Filtering Tools (date, test type, deviations, etc.)
- Intuitive Test Status by Color
- Additional GIS Layers
- Augmented Testing Reports with In-Place Locations
- Quicker Turnaround Time

One of Terracon Compass' greatest strengths is that we curate your projects for your future. Terracon Compass shows your team members an interactive map with locations of past and present projects to navigate geographically; or for those that prefer a tabular format, we have that option too. Either way, as you collaborate with Terracon, your team members will be able to build a library of past projects curated online through a secured login. That means a few years after completion, your team can readily find a final, signed deliverable.

How It Works:

We overlay your project drawings into an accessible GIS map. Our field professionals will locate where they are standing on the plan through their mobile devices. When performing a test or observation, they simply drop a pin where the work is, perform our work, and collect the data. Field professionals complete the data collection through intuitive forms built into the application. Once complete, the technicians can submit the report from their device in the field which dramatically reduces report turnaround time. After the report has been reviewed and approved it is visible in Terracon Compass.

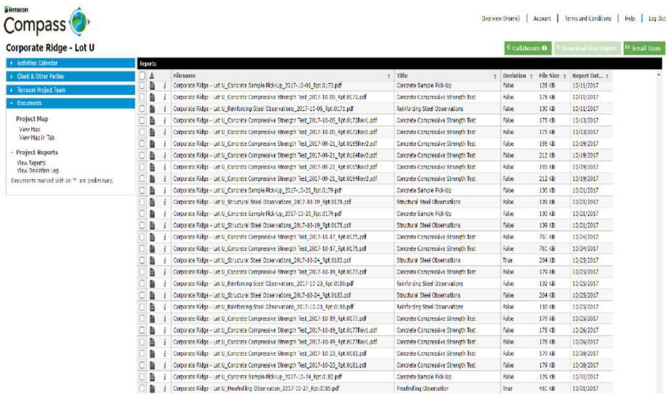
Imagine seeing all your materials testing data for your project on one screen, located where the work occurred, and with intuitive filters to find what you need. What used to take hours can now be accomplished in minutes using Terracon Compass.



Compass Reporting:

Features include:

- Ability to download at your convenience
- Report renaming capabilities to meet your project needs and file naming requirements
- Ability to sort by date, report type, service, and file name to quickly find what you need.
- https://client.terracon.com



Commitment to Safety

Terracon is fully committed to the safety of all its employees. As such, and in accordance with our Incident and Injury Free® safety culture, Terracon will hold a meeting to review health and safety needs for this specific project. Anticipated safety concerns could include uneven terrain, remote site conditions, water hazards, and animal, insect, or toxic plant exposure. It may become necessary to provide additional measures to improve the safety of our employees, at additional cost, to reduce the risk for personal exposure. In the event your company is aware of specific safety concerns for the project site, Terracon respectfully requests notification of such concerns prior to mobilization.

2.0 Project Information

Our understanding of the required construction materials testing services for this project is based upon information provided by your firm, our experience with other projects of this type, and the following information:

- 90% Plans, by Dibble and dated 07/11/2024.
- Draft 7460-1 Exhibit, by Dibble and dated 07/11/2024.
- Draft Construction Safety and Phasing Plan, by Dibble and dated 07/11/2024.
- Pre-Final Contract Documents, by Dibble and dated 07/11/2024.
- Pre-Final Engineer's Design Report, by Dibble and dated 07/11/2024.
- Scope, material quantities, and testing frequency review/discussion with Jared Bass, P.E. on 03/11/2025.
- Geotechnical Engineering Report prepared by Terracon, Project No. 20235002, dated November 13, 2023.

A construction schedule was not provided to Terracon prior to the issuance of this proposal, therefore our assumptions on the schedule should be considered an estimate until we can review the contractor's schedule. Pertinent project information is summarized below:

Item	Description
Location	The project site is located at the Northern Colorado Regional Airport (FNL), which has an address of 4900 Earhart Road in Loveland, Colorado.

Item	Description
Project Description	Terracon understands the project will begin May 2026 for a 203 day duration. The project includes the widening of Runway 15-33 by 25 feet on each side. Runway 15-33 is approximately 8,500 feet long and is constructed of asphalt pavement. The pavement at each of the 5 taxiway connectors will be partially demolished to the extents of the runway widening. The existing edge drains which parallel the existing runway will be removed, and new edge drains will be constructed along the widened sections.
Geotechnical Investigation	A geotechnical engineering report has been prepared by Terracon (Project No. 21245038, dated February 6, 2025.
Off-site improvements	Off-site improvements are not anticipated in this scope of work.

3.0 Scope of Services

Terracon proposes to provide materials testing services as summarized below:

Task	Description
Concrete: P-610	A Terracon Engineering Technician will obtain samples and perform testing during concrete placements for the following elements: ■ Miscellaneous Structures (Airfield Lights & Signs) The concrete will be sampled and tested for slump, air content, unit weight, and temperature at the time of placement. Cylinders and beams will be made and initially cured on site. Per ACI, A Terracon Engineering Technician will return to the site within 2 days to bring the specimens to our laboratory for final curing and for the appropriate flexural strength or compressive strength testing. Testing will be performed in general accordance with project plans and specifications. ■ P-610: Cast 1 set of 5 (4-inch by 8-inch) cylinders for each day's placement for the airfield lights and signs.
Earthwork: P-152, P-154, P-156, P-209, P-403, & D-705/L-108/L-110/L-115	A Terracon Engineering Technician will obtain samples for laboratory tests, perform in-place field density testing, perform proofrolling observations, and/or perform soil observations for the following elements: ■ P-152 (52,668 CY) Over-Excavation of Unsuitable Materials and Replacement with Suitable Materials ■ D-705/L-108/L-110/L-115 (Backfilling) ■ P-403 (20,711 TON) AC Stabilized Base Course ■ P-153 Verify batch tickets for Controlled Low-Strength Material (CLSM) as backfill for RCP under pavement ■ P-154 (52,668 SY) Subbase Course ■ P-209 (55,602 SY) Crushed Aggregate Base Course

Task	Description
	The specified frequency of testing is as follows: P-152 (1 per 1,200 SY per lift), P-154 (1 gradation per day), P-156 (1 per 1,000 SY), P-209 (1 per 1,000 SY), P-403 (1 per 500 Ton), and D-705/L-108/L-110/L-115 (same as P-152: 1 per 1,200 SY per lift).
(P-401) Hot Mix Asphalt (HMA) Pavements	A Terracon representative will be provided, on an as-scheduled basis, to sample the plant-produced hot mix asphalt (HMA) used during paving operations. Sampling will occur onsite at the point of placement. Laboratory testing of the Superpave HMA will include the determination of air voids of the laboratory compacted specimens (ASTM D6925, D6752, D2041, and D3203) for each sublot. Field placed HMA mat and joint densities will be determined by testing contractor-drilled core samples in accordance with ASTM D2726. All laboratory testing will be performed in a Terracon AASHTO re:source accredited laboratory.
Project Management	A Terracon Project Manager will be assigned to the project to review the daily activity and assist in scheduling the work. Field and laboratory tests will be reviewed prior to final submittal. The project manager will be responsible for the project budget, communicating with the contractor regarding schedule, deviations, and documenting the resolution of outstanding deviations. A Terracon Project Engineer will be assigned to the project to provide quality overview and provide an engineered stamped Letter of Compliance. To help create a good working relationship with the contractor and for the contractor to better understand our scope of work for the project, we request that Terracon be invited to preconstruction meetings prior to each phase of construction.

Commitment to Timely Report Turnaround:

We understand the importance of report turnaround to our clients and we are committed to delivering test results on a timely basis as well as the following reporting standards:

- Failing tests or non-conformance items will be communicated to the designated parties prior to leaving the site and handwritten draft reports are available at the end of each day.
- Final reports with non-conformances (Deviation Reports) will be provided within 24 hours of testing.
- Final reports without non-conformances will be provided within five business days.
- Final laboratory test reports will be provided within two days of test completion.

Terracon Field Representative:

In addition to the above services, our field personnel will provide the following services during their visit:

- Check in with the project general superintendent upon arrival on-site.
- Confirm that current approved construction documents are available during our visit.
- Notify the general contractor of our field observations and test results prior to leaving the site.
- Submit a typed draft report from the project site to the Terracon project manager for review.
- Our field personnel have the right to decline work if they believe the conditions are not safe.

Scheduling of Services:

We understand that the client may not be involved with scheduling our services; this is typically the responsibility of the general contractor. We request that the following information be passed on to whom will be responsible for scheduling our services.

- Scheduling testing services must be requested no later than 3:00 pm on the business day preceding the work.
- Scheduling is performed through our dispatcher by calling (970) 658-4405
- For instances of short-notice (same day) requests, personnel who have a higher rate than those normally assigned may have to be utilized to cover the request, and this higher cost may be passed on to the client.
- Cancellation of services should be done prior to a Terracon representative mobilizing to the project. Failure to do so will result in a cancellation fee of the minimum personnel hourly charge, report fee, and vehicle charge.
- Terracon will not be responsible for tests that are not performed due to a failure to schedule our services on the project.
- Testing and observations will only determine compliance with project specifications at the test locations, at the time our services are performed.

4.0 Compensation

Based on the project information available for our review, our time and materials estimated budget to perform the proposed scope of services is $263,130. A summary of our unit rates, estimated quantities, and the resulting costs is included on the attached Fee Estimate. Fees for services provided will be based on the unit rates shown in that exhibit. Please note that this is only a budget estimate and not a not-to-exceed price. Any additional out-of-scope items will be performed in accordance with our current fee schedule.

Many factors, including those out of our control, such as weather and the contractor's schedule including overtime and weekend work, and the need for re-testing will dictate the final fee for our services. We will track the costs of re-testing, stand-by time, and cancellations separately.

For purposes of our proposal, overtime is defined as all hours in excess of 8 hours per day and all hours worked on Saturdays & Sundays, Night hours (between 7:00 PM and 5:00 AM), and Terracon recognized Holidays (New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving & Christmas Day). Overtime rates will be 1.5 times the hourly rate quoted. All charges are portal to portal. Minimum of 4 hours will be charged for each site visit.

5.0 Assumptions

- We have assumed that contractors on the site will work a single shift, typical schedule of 5 days per week.
- Night work is not anticipated for Terracon based on discussions with Dibble on March 11, 2025.
- We understand the project will begin May 2026 for a duration of 203 days. Terracon has incorporated 2026 billing rates into this proposal. Should the project continue into 2027 or beyond, we reserve the right to update our rates accordingly.

- An out-of-scope charge at the applicable unit rate will be applied for all stand-by time and/or time spent on activities which are not cancelled with prior notice.
- Staff time, laboratory testing and extra trips required for re-testing and re-inspections will be denoted on the monthly invoices as such and be considered out-of-scope or additional items not included in the above estimated budget.

6.0 Authorization

Your authorization for Terracon Consultants, Inc. (Terracon) to proceed in accordance with this proposal can be issued by providing us with an Independent Consultant Agreement form for our review. We anticipate the agreement can be executed once Terracon and Dibble have agreed to mutually acceptable contract terms and conditions.

We appreciate the opportunity to provide this proposal and look forward to working with you. Please give us a call if you have any questions or comments regarding this proposal.

Sincerely,
Terracon Consultants, Inc.

Chris A. Rivera
Assistant Project Manager

Todd A. Turney
Materials Department Manager

Copies to: Addressee (via e-mail)

Enclosures: Fee Estimate

FEE ESTIMATE

Construction Materials Engineering and Testing Services
FNL Runway 15-33 Widening
Terracon Proposal No. P20251016

SERVICES	UNIT RATES			QTY	TOTAL
P-152 Over-Excavation of Unsuitable Materials and Replacement with Suitable Materials (52,668 CY)					
Laboratory Compaction Characteristics (Proctor)	$200.00 per test	4 tests		4	$800.00
Engineering Technician	$100.00 per hour	44 visits	4 hours/visit	176	$17,600.00
Report Fee	$50.00 per report	48 reports		48	$2,400.00
Vehicle Charge	$30.00 per trip	44 visits		44	$1,320.00
				Subtotal	$22,120.00
L-108/L-110/L-115/D-705 Backfilling (P-152 requirements)					
Laboratory Compaction Characteristics (Proctor)	$200.00 per test	6 tests		6	$1,200.00
Engineering Technician	$100.00 per hour	50 visits	4 hours/visit	200	$20,000.00
Report Fee	$50.00 per report	56 reports		56	$2,800.00
Vehicle Charge	$30.00 per trip	56 visits		56	$1,680.00
				Subtotal	$25,680.00
P-401 AC Surface Course (14,774 TON)					
Engineering Technician	$100.00 per hour	30 visits	8 hours/visit	240	$24,000.00
Superpave Volumetric Properties, including Rice	$850.00 per test	30 tests		30	$25,500.00
Contractor provided cores for density & thickness	$150.00 per core	60 cores		60	$9,000.00
Report Fee	$50.00 per report	90 reports		90	$4,500.00
Vehicle Charge	$30.00 per trip	60 visits		60	$1,800.00
				Subtotal	$64,800.00
P-154 Subbase Course (52,668 SY)					
Gradation	$150.00 per test	44 tests		44	$6,600.00
Laboratory Compaction Characteristics (Proctor)	$200.00 per test	4 tests		4	$800.00
Engineering Technician	$100.00 per hour	44 visits	4 hours/visit	176	$17,600.00
Report Fee	$50.00 per report	92 reports		92	$4,600.00
Vehicle Charge	$30.00 per trip	48 visits		48	$1,440.00
				Subtotal	$31,040.00
P-403 AC Stabilized Base Course (20,711 TON)					
Gradation	$150.00 per test	42 tests		42	$6,300.00
Laboratory Compaction Characteristics (Proctor)	$200.00 per test	4 tests		4	$800.00
Engineering Technician	$100.00 per hour	42 visits	4 hours/visit	168	$16,800.00
Report Fee	$50.00 per report	42 reports		42	$2,100.00
Vehicle Charge	$30.00 per trip	46 visits		46	$1,380.00
				Subtotal	$27,380.00
P-209 Base Course (55,602 SY)					
Gradation	$150.00 per test	94 tests		94	$14,100.00
Laboratory Compaction Characteristics (Proctor)	$200.00 per test	4 tests		4	$800.00
Engineering Technician	$100.00 per hour	47 visits	4 hours/visit	188	$18,800.00
Report Fee	$50.00 per report	98 reports		98	$4,900.00
Vehicle Charge	$30.00 per trip	51 visits		51	$1,530.00
				Subtotal	$40,130.00
P-610 Concrete for Misc. Structures (Airfield Lights & Signs)					
Engineering Technician (concrete testing)	$100.00 per hour	5 visits	4 hours/visit	20	$2,000.00
Engineering Technician (cylinder pickup)	$100.00 per hour	5 visits	4 hours/visit	20	$2,000.00
Concrete Cylinders	$30.00 per cylinder	5 tests	5 cyl/test	25	$750.00
Report Fee	$50.00 per report	5 reports		5	$250.00
Vehicle Mileage	$30.00 per trip	10 visits		10	$300.00
				Subtotal	$5,300.00
Drainage Rock					
Geotechnical Engineer (Proof Roll Observation)	$190.00 per hour	5 visits	4 hours/visit	20	$3,800.00
Report Fee	$50.00 per report	5 reports		5	$250.00
Vehicle Charge	$30.00 per trip	5 visits		5	$150.00
				Subtotal	$4,200.00
Report Review, Engineering & Management					
Project Manager	$160.00 per hour		203 hours		$32,480.00
Department Manager/Quality Review	$190.00 per hour		50 hours		$9,500.00
Compliance Summary (if needed)	$500.00 each		1 report		$500.00
				Subtotal	$42,480.00
			Total Estimated Fee		**$263,130.00**

Note: While the phases of construction have been separated for estimating purposes in the fee estimate spreadsheet, actual field testing services may be performed simultaneously on the various phases. As a result, total fees for construction materials testing services may be reduced if services are performed during the same trip to the site.

March 14, 2025

Dibble Engineering
2696 South Colorado Blvd., Suite 330
Denver, Colorado 80222

Attn.: Mr. Jared Bass, P.E.

Re: Northern Colorado Regional Airport RWY-15-33 Widening
Proposal for Electrical Construction and Inspection Services (CA&I)
CRE Project No. 22042SDC

Dear Mr. Bass,

We thank you for choosing our firm to work as your engineer for the above project. We are pleased to present our proposal for electrical CA&I services in the listed attachments below.

Scope of Work

Fee Proposal

Please do not hesitate to call if you have any questions.

Sincerely yours,

CR ENGINEERS, INC.

Catherine Alcorn, P.E.
President

SCOPE OF WORK

NORTHERN CO REGIONAL AIRPORT

RUNWAY 15-33 WIDENING

Electrical Construction Phase Services

Prepared by CR Engineers, Inc.
MARCH 14, 2025

CR Engineers (CRE) will provide electrical construction phase services for the proposed Runway 15-33 Widening at Northern Colorado Regional Airport. Construction expected to occur between May – November 2026. This scope of work consists of comprehensive construction phase services as outlined below:

1. Pre-Construction Meeting: CRE will attend the pre-construction meeting virtually.

2. Review Contractor's Monthly Pay Apps: CRE will review the electrical contractor's pay apps for quantity verification.

3. Site Visits and Inspections: CRE will perform periodic construction inspection and observation on the electrical components of the project estimated at 80 days.

4. Shop Drawing Review and Coordination: CRE will review and provide a response to electrical project submittals as requested (estimated at 20 submittals).

5. RFI Review and Coordination: CRE will review and provide responses to electrical construction and technical project Requests for Information (RFI) estimated at 5.

6. ESI Preparation and Coordination: CRE will provide necessary Engineering Supplemental Information (ESI) documents estimated at 2.

7. Final Walk Inspection: CRE will attend the final completion electrical inspections/walk estimated at (1) final completion inspection/walk.

8. Punchlist(s) and Coordination(s): CRE will prepare, submit, and re-evaluate electrical punchlists at each substantial completion and final walk.

9. Record Drawings: CRE will develop the final Electrical Record Drawings based on Contractor redlines and field changes issued during construction, including RFI's/ESI's.

Fees

See attached Exhibit B for proposed fee schedule and detailed task descriptions.

CR Engineers, Inc.
Fee Proposal Summary

Project Name: Northern CO Regional Airport RWY 15-33 Widening
Date: 03/14/25
CRE Proposal No.: 22042SDC

FEES

Overhead Rate:	150 %
Profit Margin:	10 %

1.0 Services During Construction Fees	$155,915.05
Total Fees	$155,915.05

ESTIMATED EXPENSES AND ALLOWANCES

Lodging

89	Trip	$140.00 /Day (2025 Federal Per Diem)	$12,460.00

Travel

9630	Miles	$0.670 /Mile	$6,452.10

Meals

89	Trip	$80.00 /Day (2025 Federal Per Diem)	$7,120.00

TOTAL ESTIMATED EXPENSES **$26,032.10**

GRAND TOTAL **$181,947.15**

CR Engineers, Inc.
1.0 Construction Administration Fee Proposal Worksheet

Project Name: Northern CO Regional Airport RWY 15-33 Widening
Date: 03/14/25
CRE Proposal No.: 22042SDC

	Task Description	Quantity	Project Manager	Senior Designer	Senior CADD Designer	Chief Electrical Inspector	Admin Assistant	Total Hours
1.0	**Construction**							
1.1	Attend Pre-Construction Meeting		1.0			1.0		2.0
1.2	Submittal/Shop Dwg Review	20	20.0			48.0	8.0	76.0
1.3	RFI Responses	5	6.0	4.0		5.0	3.0	18.0
1.4	ESI Preparation	2	4.0	4.0	8.0	3.0	1.0	20.0
1.5	Site Inspections	80 days				884.0	4.0	888.0
1.6	Review of Contractor Pay Apps					14.0		14.0
1.7	Substantial Completion, Commissioing, Final Inspection(s)/Walk Through	1				32.0	1.0	33.0
1.8	Record Drawings		3.0		16.0	8.0	1.0	28.0
1.0	**Totals**		**34.0**	**8.0**	**24.0**	**995.0**	**18.0**	**1079.0**

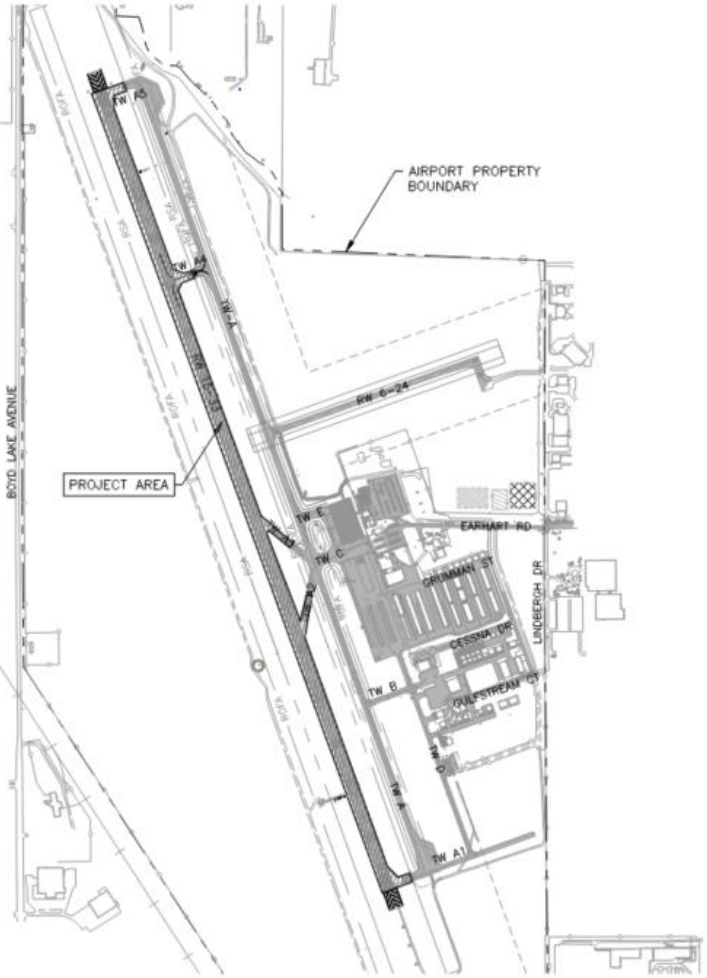
	Overhead Rate	150 %
	Profit Margin	10 %

	Labor Rates Per Hour:		$77.48	$48.04	$40.39	$52.50	$26.16	
	Direct Labor:		$2,634.32	$384.32	$969.36	$52,237.50	$470.88	
	Overhead:		$3,951.48	$576.48	$1,454.04	$78,356.25	$706.32	
	Overhead + Direct Lab:		$6,585.80	$960.80	$2,423.40	$130,593.75	$1,177.20	
	(OH + Direct) x Profit:		$658.58	$96.08	$242.34	$13,059.38	$117.72	
1.0	**Total Fees**		**$7,244.38**	**$1,056.88**	**$2,665.74**	**$143,653.13**	**$1,294.92**	**$155,915.05**

EXHIBIT A – SCOPE OF WORK
NORTHERN COLORADO REGIONAL AIRPORT
LOVELAND, COLORADO

AIRPORTS GIS SURVEY

AIRPORTS GEOGRAPHIC INFORMATION SYSTEMS (AGIS) SURVEY



SCOPE OF PROFESSIONAL SERVICES

TASK 1 - CONTRACT ADMINISTRATION

During the Project, the following general administrative services shall be provided.

1.1 Safety Critical, Including Design Data As-Built AGIS project: Aerial photogrammetry, and mapping will

be obtained in accordance with FAA requirements and standards. Consultant will use an aerial imagery subconsultant to provide field work, computations, and data to the FAA, per FAA ACs 150/5300-16A, -17C, and -18B, including:

- ABGPS Control Surveying
- Stereo Color Aerial Photography
- As-Built Field Survey
- FAA AGIS Work Plans and Data Uploads

1.2 AGIS Submittal: Consultant will work with the National Geodetic Survey (NGS) and the FAA AGIS program to acquire and submit the necessary data to complete the As-Built portion of the existing AGIS project # FNL-270899. The AGIS Submittal including survey data, as-built imagery, and final report. An Airspace analysis will not be completed as part of the as-built project. If construction exceeds AC-18B tolerances then a subsequent Airspace Analysis may be required and is not included in this scope of work. All necessary existing information will be submitted through the FAA AGIS portal as required by the FAA.

1.3 Subconsultant Tasks: The following items will be performed by a subconsultant for this project:

- Provide and submit a Survey and Remote Sensing Plan
- Collect as-built imagery

1.4 Data Submission: The consultant will make maximum use of existing data for the Airport, which is traceable to the source to meet the requirements of this SOW before undertaking additional data collection. Data collected or proposed for use in a project must meet the tolerances specified in the above Advisory Circulars at the 95 percent confidence level (RMSE) before being used in the project or as part of the required deliverables.

As authorized by the Sponsor, the Consultant will submit all data collected and associated required deliverables in the format(s) specified as outlined in the appropriate Advisory Circular to the FAA Office of Airports, Airport Surveying-GIS Program. All data submissions to the FAA will be through the program's website at http://adip.faa.gov. The website also provides guidance on the proper preparation of data for National Geodetic Survey (NGS) for verification. It is assumed that the Client will provide the Consultant all design data in support of the Final Report including photos and sketches for runway ends and navaids, checklists, TBC file, miscellaneous survey points, control sheets, OPUS reports, and any additional information collected prior to the as-built portion of the project and in support of the Final Report.

1.5 Data Attribution: The Consultant will collect and attribute features to the requirements of FAA AC 150/5300-18B and submit the attributed features to the AGIS system. The Sponsor will be able to download and distribute AGIS data for future projects. Consultant will be responsible for the submission, and subsequent acceptance, of mapping and survey data to FAA and NGS as a part of this Plan. Consultant will provide AGIS shapefiles compatible with ArcGIS to the Sponsor. The following features will be included in the as-built survey and attribution.

- AirportControlPoint
- NavaidEquipment
- TaxiwayElement

- TaxiwayHoldingLine
- TaxiwayIntersection
- Runway
- RunwayCenterline
- RunwayEnds
- RunwayBlastPad

1.6 Deliverables: Consultant will upload the Final Report and Safety Critical Survey data to http://adip.faa.gov in compliance with the standards of 150/5300-18B.

Total Fee: $55,697.00 (to be billed on a Lump Sum basis)

RESPONSIBILITIES OF OWNER

Consultant's Scope of Services and Compensation are based on the Owner performing or providing the following:

- A designated representative with complete authority to transmit instructions and information, receive information, interpret policy, and define decisions.
- Access to the project site.
- Available data, drawings, and information related to the project including as-built drawings of existing facilities.
- Protection of Consultant-supplied digital information or data, if any, from contamination, misuse, or changes.

EXCLUDED ITEMS

The following items are specifically excluded from this Scope of Work:

- Contractor pre-qualification services and meetings.
- Special consultant services that are not normal to this type of project.
- Special site retaining, soils conditions, and associated engineering specific to this site.
- Special structural engineering not normal to this type of project (i.e., piling design and engineering).
- Coordination of documents and associated environmental testing of existing structures for mitigation or removal of hazardous materials (i.e., asbestos).
- Airports Airspace Analysis.
- Photos and sketches of existing control and checkpoints.
- Final Report documents prior to as-built survey.
- Non-Safety Critical features AirfieldLights, AirfieldSigns, MarkingLines, MarkingAreas, etc. will not be submitted to AGIS as part of this project.

AGIS SURVEY PROJECT PLANNING GUIDE (Ver. 3.1)

PLEASE NOTE:
- This guide does not cover all situations and should be considered a "General Reference Only" for airport construction scoping/planning projects that require an AGIS Survey compliant submittal.
- Always verify AGIS Survey project requirements using the most current version of AC's 150/5300-16, -17, and-18.
- Review the 2022 AGIS Survey Policy Guidance Letter (PGL) for required AGIS project types and Safety Critical Data tolerances and required AGIS Survey project types.
- The Office of Airports is the only source for direction, clarification, or advice on airport survey data requirements for construction projects.

PRIMARY PROJECT PURPOSE	Has Existing AAA < 3-Yrs Old?	AGIS REQUIRED PROJECT TYPE		New AAA Required?	Design Phase Imagery Type		Required As-Built Phase Imagery (For Verification of SCD)	Reason/Direction
		DAB	AB Only		Previous < Imagery 3-Yrs Old	New Imagery		
RWY PROJECTS (SAFETY CRITICAL DATA SUBMITTAL)								
Include Any New or Reconstructed Taxiways In the Project Scope/AGIS Survey Submittal (Submit the Entire Length of the Taxiway. For AMDB, Consider Including/Updating Attached Taxiways and Markings)								
New RWY	---	YES	---	YES	---	YES - Full AAA OIS	YES - RWY + Construction Area(s)	IFP Dev & New OIS Sfcs
PROJECT NOTE(S): None								
VFR to IFR RWY (No RWY Construction)	---	---	YES	YES	---	---	YES - Full AAA OIS	IFP Dev & New OIS Sfcs
PROJECT NOTE(S): None								
VFR to IFR RWY (With RWY Construction)	---	YES	---	YES	---	YES - Full AAA OIS	YES - RWY + Construction Area(s)	IFP Dev & New OIS Sfcs
PROJECT NOTE(S): None								
Physical RWY End Change/Relocation	YES	YES	---	YES	(1)	(2)	(1)	IFP Dev & New OIS Sfcs
(RWY Shift, Extension, Reduction, Relocation, etc.)	NO				---	(2)	(2)	
PROJECT NOTE(S): None								
Add New or Alter Existing Displaced (Landing) Thld	YES	YES	---	# SITUATION SPECIFIC	(1)	(2)	(1)	IFP Dev & Changes to DDs
(No "Planned" RWY End Feature Changes)	NO	YES	---	YES	---	(2)	(2)	IFP Dev & Changes to DDs
PROJECT NOTE(S): The term "***Alter***" includes addition, relocation and/or removal of a feature. # To ensure Safety of Flight, and to ensure that all publised IAPs have the best minima available, a new/updated AC-18 AAA may be required (or requested by the Flight Procedures Team during project scoping) for this project type. The age of a previously completed AAA (if any) and size of the airport should be key determining factors in the decision to require/not require a new AAA survey.								
LINEAR RWY Widening/Narrowing	YES	YES	---	** POSSIBLE	(1)	(2)	(1)	IFP Dev (VGS Surface)
(No "Planned" Changes to RWY End/CL)	NO			** YES	---	(2)	(2)	
PROJECT NOTE(S): ** If more pavement is added/removed on one side of the RWY centerline than the other (see OFFSET RWY Widening/Narrowing project type below), this will result in the movement of the Physical RWY End points and RWY CL. If this move is more than the 2022 AGIS Survey PGL requirements, this project will require a new AC-18 AAA to be performed in a DAB AGIS Survey project. Also, a new AAA will be required if the RWY is other than a VFR only utility RWY (i.e., circling is NA's to that RWY on IAP charts) and does not have a current AAA in AGIS Survey.								
OFFSET RWY Widening/Narrowing	YES	YES	---	YES	(1)	(2)	(1)	IFP Dev & Req New OIS Sfcs
(Changes Expected to RWY End/CL Locations)	NO				---	(2)	(2)	
PROJECT NOTE(S): None								
RWY Rehab/Reconditioning (Mill & Overlay)	YES	---	# YES	# POSSIBLE	---	---	# REQUIRED	Grant Component
(No Expected Changes to Safety Critical Data)	NO			YES	---	---		
PROJECT NOTE(S): # If the As-Built survey finds that Safety Critical Data features (i.e., RWY Ends, RWY CL, Airport Control Points, etc.) were moved by amounts exceeding the 2022 AGIS Survey PGL requirements, a new AGIS Design/As-Built project with an AC-18 AAA survey may be required (See project type "Physical RWY End Change/Relocation" above). Imagery is required for verification. Quality Control is key to ensuring this process does not modify any current published Safety Critical RWY feature data.								
RWY Rehab/Reconditioning w/ Temporary Conditions	---	---	# See Note	# See Note	---	---	# See Note	---
(Multi-Phased Project w/ Temp Third Party VG IAPs)	---				---	---		
PROJECT NOTE(S): # The AGIS Survey Program does not require reporting of data supporting any "temporary" conditions. The program is designed to align an airport's proposed construction (Design) and project completion (As-built) with the AIRAC publication cycles. It is not designed to accommodate temporary construction scenarios, nor supporting the data submittals, between those cycles as is being sought under the Non-FAA Service Provider/Third Party Procedure Development Program of providing airports with IAP's including Vertical Guidance during rehabilitation projects. **IMPORTANT NOTE**: All NPIAS airports conducting runway rehabilitation projects are required to provide an AGIS As-built Survey within the Airport Data and Information Program (ADIP) Airports Geographic Information System (AGIS Survey) application as an obligation, and under agreement, with the FAA in accordance with the ***2022 AGIS Survey Program Guidance Letter*** **and companion** ***Advisory Circulars*** . Please refer to "***RWY Rehab/Reconditioning (Mill & Overlay)*** " project type above.								

AGIS SURVEY PROJECT PLANNING GUIDE (Ver. 3.1)

PLEASE NOTE:
- This guide does not cover all situations and should be considered a "General Reference Only" for airport construction scoping/planning projects that require an AGIS Survey compliant submittal.
- Always verify AGIS Survey project requirements using the most current version of AC's 150/5300-16, -17, and-18.
- Review the 2022 AGIS Survey Policy Guidance Letter (PGL) for required AGIS project types and Safety Critical Data tolerances and required AGIS Survey project types.
- The Office of Airports is the only source for direction, clarification, or advice on airport survey data requirements for construction projects.

PRIMARY PROJECT PURPOSE	Has Existing AAA < 3-Yrs Old?	AGIS REQUIRED PROJECT TYPE		New AAA Required?	Design Phase Imagery Type		Required As-Built Phase Imagery (For Verification of SCD)	Reason/Direction
		DAB	AB Only		Previous < Imagery 3-Yrs Old	New Imagery		
RWY PROJECTS (SAFETY CRITICAL DATA SUBMITTAL) (cont.)								
RWY Decommissioning	---	---	---	---	---	---	---	---
PROJECT NOTE(S): The decommissioning of a RWY does not require an AGIS Survey or RAM obstacle mitigations. For Federally Obligated airports, this can be coordinated using the ALP Update process. Non-Obligated airports can use the ADIP Digital 7480-1 submitted through ADIP.								
CIRCLING AUTHORIZED RWY - OBSTACLE SURVEY REQUIREMENTS								
Circling Authorized RWYs - AAA Surveys	YES	---	YES	POSSIBLE	(1)	(2)	(1)	Minimum - NVG-AAA
(Includes Circling Sector Restricted RWYs)	NO			YES	---	(2)	(2)	
PROJECT NOTE(S): A circling approach is an IFR maneuver completed in VM (Visual Meteorological) Conditions. If "Circling NA to Rwys ##-##" is listed in the remarks section of current Instrument Flight Procedure Charts, an AC-18 AAA survey is not required for that RWY. If circling is authorized to a RWY (including RWYs with circling restricted areas - i.e., "Circling NA W of Rwys ##-##"), at a minimum, an AC-18 NVG-AAA is required in order to identify obstacles within the circling approach areas and to establish the lowest possible Circling Minimum Descent Altitudes (MDA) for each Aircraft Category authorized to execute the IAP/circling maneuver.								
STAND-ALONE TAXIWAY CONSTRUCTION PROJECTS (SAFETY CRITICAL DATA SUBMITTAL)								
Taxiway Construction	---	---	YES	NO	---	---	YES - Required for Verification	SCD
(Includes new, redesign, repair, or removal)								
PROJECT NOTE(S): None								
ALP/MASTER PLAN UPDATE PROJECT								
ALP/Master Plan Update	---	---	YES	YES	---	---	## YES	Table 2-1 Required
PROJECT NOTE(S): *Submit As-Built/Published Data Only to this project* . Do not include any changed data, or planned changes to existing airport features with this survey data submittal. ## AC-17 compliant AAA OIS imagery is required for ALL runways in order to verify that safety critical data was not altered from current published values, or exceeds the 2022 AGIS Survey Policy Guidance Letter.								
STAND-ALONE VISUAL NAVAID PROJECTS								
Stand-Alone Visual NAVAID Installation/Relocation	---	---	---	NO	---	---	---	Submit FAA VGSI Form
PROJECT NOTE(S): https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/7900.2D-VGLS/								

SUPPLEMENTAL REFERENCE GUIDE INFORMATION

IMAGERY FOOTNOTES:

(1) If the project will utilize previous collected AGIS Survey project imagery in the Design Phase (i.e., AAA imagery that is less than 3-years old from the Date of Imagery Acquisition), new AC-17 compliant AAA area imagery is required to be gathered/delivered in the As-Built phase. Ensure project plans for the collection/submittal of AC-17 compliant imagery for both AGIS Survey project Phases is described thoroughly in the SOW and the Imagery Plan documents.

(2) If full AC-17 compliant AAA imagery is gathered/submitted in the AGIS Survey project Design Phase, an "Imagery Update" flight is required in the As-Built Phase that encompasses the entire construction area and all project associated RWYs.

ACRONYMS:

AAA - Airport Airspace Analysis, AB - As-Built Project Type (i.e., Safety Critical Data Collection, Not Including Design Data), AC - Advisory Circular, AC-17 - AC 150/5300-17 (Current Version), AC-18 - AC 150/5300-18 (Current Version), ADIP - Airport Data and Information Portal, CL - (RWY) Centerline, AGIS - Airports GIS (see also ADIP), ALP - Airport Layout Plan, AMDB - Airport Mapping Database, DAB - Design/As-Built Project Type (i.e., Safety Critical Data Collection, Including Design Data), DD - Declared Distances, DEV - Development, IAP - Instrument Approach Procedure, IFP - Instrument Flight Procedure, NAVAID - Navigational Aid, NVG-AAA - AC-18 Non-Vertically Guided Airport Airspace Analysis, OIS - Obstruction Identification Surface (see AC-18), PGL - Program Guidance Letter, RAM - RWY Airspace Mitigation (see also ADIP), REQ - Required, RWY - RWY, SCD - Safety Critical Data (see AC 150/5300-18B, Para 4.1.3), SFC/SFCS - Surface/Surfaces, THLD - Threshold, SOW - Statement of Work, VG - Vertically Guided, VGLS - Visual Guidance Lighting System, VGS - Vertical Guidance Surface (TERPS Visual Evaluation Surface - Previously GQS)

March 13, 2025

Jared Bass
Dibble Corporation
2696 South Colorado Blvd, Suite 330
Denver, CO 80222

RE: Professional Surveying Services – Northern Colorado Regional Airport- RW 15-33 Widening, Loveland, CO

Delta Field Services LLC (DFS) is pleased to submit this proposal for surveying services for the above site. Our scope of services is based upon our interpretation of the emails, plans and addendums received from you.

Project Description

The intent of the services described herein is to provide surveying services for the said site mentioned above. DFS will assign a Project Manager to serve as a point of contact for the duration of the project. The Project Manager will facilitate communication and collaborate with the client, as necessary.

Scope of Services

- As-Built Survey Services
  - Perform the as-built survey on the above referenced project site. The as-built survey will include at a minimum the following-
    - RW CL
    - RW End Points (monuments or nails)
    - New Pavement Joint Line
    - RW Pavement Edge
    - All RW Lights and Signs
    - All newly graded in-fields within the boundary
    - Connector TW's CL (5)
    - New Pavement Joint Line on Connector TW's (5)
    - TW Pavement Edges
    - PAPI Boxes
    - RW Blast Pads
    - All RW and Connector Taxiway Pavement Markings
    - All visible (newly constructed) drainage structures and boxes)

Fees

- As-built Survey Services **$9,500**

Deliverables

Deliverables will consist of an AutoCAD drawing, PDF, and CSV file of all located survey data. Along with an updated survey control sheet.

Timing

Mobilization can occur within two (2) working days of "Notice to Proceed:" We will provide a single point of contact for communications and scheduling activities. We have the ability to provide as many as 4 survey crews as necessary to meet project scheduling needs. Staking activities will require 48 hours advance notice but, depending on the availability of our crews, this timeline can often be shortened.

Assumptions

Our proposal assumes the following: Digital AutoCAD drawing files will be provided for the project, and that all previous existing survey control will be provided and that it will be adequate for the construction surveying effort.

DFS assumes the following:

- It is assumed 100% survey access will be provided prior to crew mobilization.
- No delays due to weather or acts of God were assumed in preparation of this proposal.
- **48-hour minimum lead time** is needed to mobilize a crew to the site for each visit.

We appreciate the opportunity to provide you with a proposal for this work. We strive to provide excellent service and will work closely with you to achieve the schedule of construction. If you have any questions or comments, please call me at 612-363-2988.

Sincerely,

COREY WEBER
Vice President
M. 612-363-2988
corey.weber@deltafieldservices.com

RESOLUTION #R-7-2025

A RESOLUTION RECOMMENDING APPROVAL TO THE LOVELAND CITY COUNCIL AND FORT COLLINS CITY COUNCIL OF AN AWARD OF A CONTRACT TO DIBBLE ENGINEERING FOR CONSTRUCTION SERVICES FOR THE RUNWAY 15-33 WIDENING PROJECT

WHEREAS, the Northern Colorado Regional Airport Commission ("Commission") was established by the City of Loveland ("Loveland") and the City of Fort Collins ("Fort Collins") pursuant to that certain Amended and Restated Intergovernmental Agreement for the Joint Operation of the Fort Collins-Loveland Municipal Airport dated January 22, 2015 ("2015 IGA"), to effectuate changes to the governance structure and pursue development of the Fort Collins-Loveland Airport (now known as the Northern Colorado Regional Airport) as a regional airport ("Airport"). The IGA was amended in 2016 and 2019; and

WHEREAS, pursuant to the 2015 IGA, as amended, the Cities reserved certain management and policy making issues that require approval of the City Councils, including "construction of capital projects except to the extent of the authority granted to the Commission." The Cities granted certain authority to the Commission, including the authority to enter into Airport contracts for goods and services, including construction of capital projects, so long as certain parameters are met; and

WHEREAS, Dibble Engineering ("Dibble") is the Airport's "on-call" engineer of record selected following a competitive qualifications process as required by the FAA and in compliance with City of Loveland procurement regulations; and

WHEREAS, Airport staff desires to utilize Dibble provide construction phase engineering services for the Runway 15-33 widening project (the "Project") and seeks the approval of the Cities in order to ensure compliance with the 2015 IGA, as amended, and to ensure the cooperation of both Cities; and

WHEREAS, the Commission desires to recommend to the Loveland and Fort Collins City Councils to approve a contract with Dibble Engineering for the Project in an amount not to exceed $1,287,784.98 (the "Contract").

NOW, THEREFORE, BE IT RESOLVED BY THE NORTHERN COLORADO REGIONAL AIRPORT COMMISSION:

Section 1. That the Commission recommends that the Loveland and Fort Collins City Councils award the Contract to Dibble Engineering for an amount not to exceed $1,287,784.98.

Section 2. That this Resolution shall be effective as of the date and time of its adoption.

ADOPTED this 16th day of June, 2025.

_____
Jeni Arndt, Chair of the
Northern Colorado Regional Airport Commission

ATTEST:

_____
Secretary

APPROVED AS TO FORM:

Laurie Wilson, Deputy City Attorney

NORTHERN COLORADO
REGIONAL AIRPORT
4900 Earhart Rd • Loveland, Colorado 80538
(970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER: 7

MEETING DATE: June 16, 2025

PREPARED BY: John S. Kinney – Airport Director

TITLE

Capital Improvement Plan 2026-2030

RECOMMENDED AIRPORT COMMISSION ACTION

Make a motion expressing the Commission's support to submit the Capital Improvement Plan (CIP) to the FAA and CDOT Aeronautics.

BUDGET IMPACT

N/A

SUMMARY

At the May meeting, the Airport Commission requested an update to the Airport's Capital Improvement Plan (CIP) following the finalization of grant funding levels from the FAA and CDOT Aeronautics for the runway widening project. That information has now been received, and an updated CIP is included in today's packet.

The CIP serves as a planning tool and does not obligate any party to take action or allocate funds. Financial commitments would come through grant awards from the FAA and/or CDOT Aeronautics, while the cities would authorize specific line items within the Airport budget. These allocations require additional review and formal action from Commission during a public meeting.

One additional change has been incorporated at the Commission's request: enhancing security access control by requiring vehicles and pedestrians to swipe their badge when exiting the airport, just as they do when entering.

Airport staff is requesting the Commission's support to submit this CIP to the FAA and CDOT in advance of the annual fall planning cycle. Any future financial commitments would be presented separately, with staff seeking Commission action at a later date.

ATTACHMENTS

- Draft 2026-2030 Capital Improvement Plan
- Draft 2026-2030 Capital Improvement Plan Exhibit

DRAFT

2026-2030
Proposed Airport Capital Improvement Plan

NORTHERN COLORADO REGIONAL AIRPORT

Funding Source	FAA AIP Airport Improvement Program		FAA BIL Bipartisan Infrastructure Law		State		Local			Other	Total Project Costs
Financial Resource Program	AIP Entitlement	AIP Discretionary	BIL Airport Improvement Grants	BIL FCT Competitive Grant Program	Colorado Division of Aeronautics		Grant Match	Additional Funding	Passenger Facility Charges	Airport Master Plan Capital Project Description Reference	
Funding Programming Method	Formulary $150K - $1.3M <10K - >10K Enplanements	Discretionary	Formulary	Discretionary	Formulary for FAA Grant Matches	Discretionary	Formulary for FAA & CDOT Grant Matches	Discretionary	Formulary $4.39 per passenger		
Grant Match Requirement	90/10	90/10	90/10	100	N/A	90/10	N/A	N/A	N/A	N/A	
2024 (Previous Year)											
New Terminal (Construction)			$ 1,590,000		$ 88,333		$ 88,333			A6	$ 1,766,667
GA Taxilanes Rehabilitation (Construction)								$ 387,564		A4	$ 387,564
Fuel Farm Capacity Expansion Siting Study								$ 72,629		B1	$ 72,629
Taxiway B & D Rehabilitation (Design & Construction)	$ 709,813				$ 39,434		$ 39,434			A8/B5	$ 788,681
Site C GA Hangar Development (Planning & Environmental)								$ 73,940		B14	$ 73,940
Totals 2024	**$ 709,813**	**$ -**	**$ 1,590,000**	**$ -**	**$ 127,767**	**$ -**	**$ 127,767**	**$ 534,133**	**$ -**		**$ 3,089,481**
AIP Entitlements Funding	$ 1,000,000										
PFC Revenues											
Funding Balance Remaining	$ 440,187		$ 316,254								
2025 (Current Year) (FAA Share of AIP & BIL Grants 95%)											
Runway 15-33 Widening (Construction)	$ 590,187	$ 15,985,407			$ 250,000		$ 622,400			A13	$ 17,447,994
Totals 2025	**$ 590,187**	**$ 15,985,407**	**$ -**	**$ -**	**$ 250,000**	**$ -**	**$ 622,400**	**$ -**	**$ -**		**$ 17,447,994**
AIP Entitlements Funding	$ 150,000										
PFC Revenues											
Funding Balance Remaining	$ -		$ 1,003,254								
2026 (FAA Share of AIP & BIL Grants 95%)											
Runway 15-33 Widening (Construction)	$ 150,000		$ 1,690,254		$ 48,428		$ 48,428			A13	$ 1,937,109
New ATCT (Environmental)				$ 350,000							$ 350,000
New Front Line Parking Lot (*Tenant Improvement*)										*Tenant*	$ 1,000,000
Totals 2026	**$ 150,000**	**$ -**	**$ 1,690,254**	**$ 350,000**	**$ 48,428**	**$ -**	**$ 48,428**	**$ -**	**$ -**		**$ 3,287,109**
AIP Entitlements Funding	$ 150,000										
PFC Revenues											
Funding Balance Remaining	$ -		$ -								
2027											
New ATCT (Design)				$ 2,000,000							$ 2,000,000
GA Apron & Taxiways Sealcoat (Design & Construction)						$ 450,000	$ 50,000			A10	$ 500,000
Through The Fence Gate								$ 300,005			$ 300,005
Totals 2027	**$ -**	**$ -**	**$ -**	**$ 2,000,000**	**$ -**	**$ 450,000**	**$ 50,000**	**$ 300,005**	**$ -**		**$ 2,800,005**
AIP Entitlements Funding	$ 150,000										
PFC Revenues											
Funding Balance Remaining	$ 150,000										
2028											
New ATCT (Construction)	$ 300,000	$ 10,800,000		$ 3,000,000	$ 250,000		$ 616,667	$ 33,333			$ 15,000,000
Runway 6-24 & Taxiway F Crack Seal and Seal Coat (Design & Construction)								$ 600,000			$ 600,000
Landside Wayfinding Signage and Landscaping								$ 150,000			$ 150,000
Access Control System Security Improvements								$ 75,000			
Terminal Parking Lot Expansion (Design & Construction)								$ 2,000,000			$ 2,000,000
Totals 2028	**$ 300,000**	**$ 10,800,000**	**$ -**	**$ 3,000,000**	**$ 250,000**	**$ -**	**$ 616,667**	**$ 2,858,333**	**$ -**		**$ 17,750,000**
AIP Entitlements Funding	$ 150,000										
PFC Revenues											
Funding Balance Remaining	$ -										
2029											
New ARFF Vehicle Acquisition	$ 1,300,000				$ 72,222		$ 72,222	$ 55,556			$ 1,500,000
Taxiway A Seal Coat, Lighting & Signage Upgrades (Design)								$ 100,000		A11	$ 100,000
T-Hangar Ramp & Stearman Taxilane Rehabilitation (Design & Construction)								$ 600,000			$ 600,000
Totals 2029	**$ 1,300,000**	**$ -**	**$ -**	**$ -**	**$ 72,222**	**$ -**	**$ 72,222**	**$ 755,556**	**$ -**		**$ 2,200,000**
AIP Entitlements Funding	$ 1,300,000										
PFC Revenues											
Funding Balance Remaining	$ -										
2030											
Master Plan w/ Updated Noise Contours	$ 720,000				$ 40,000		$ 40,000				$ 800,000
Taxiway A Seal Coat, Lighting & Signage Upgrades (Construction)	$ 580,000	$ 1,616,288			$ 122,016		$ 122,016			A13	$ 2,440,320
Taxiway D & A1 Rehabilitation (Design & Construction)						$ 270,000	$ 30,000				$ 300,000
Complete VSR (Design & Construction)								$ 500,000			$ 500,000
Airport Entrance Road Improvements (Design & Construction)								$ 1,000,000			$ 1,000,000
Totals 2030	**$ 1,300,000**	**$ 1,616,288**	**$ -**	**$ -**	**$ 162,016**	**$ 270,000**	**$ 192,016**	**$ 1,500,000**	**$ -**		**$ 5,040,320**
AIP Entitlements Funding	$ 1,300,000										
PFC Revenues											
Funding Balance Remaining	$ -										
Totals 2026-2030	**$ 3,050,000**	**$ 12,416,288**	**$ 1,690,254**	**$ 5,350,000**	**$ 532,666**	**$ 720,000**	**$ 979,333**	**$ 5,413,894**	**$ -**		**$ 31,077,434**
Unfunded Projects											
New SRE Equipment (Blower & Broom Attachments, Oshkosh)											$ 750,000
New SRE Equipment (Front End Loaders)											$ 700,000
New SRE Equipment (Compact Tractors & Mowing Attachments)											$ 50,000
New SRE Equipment (Utility Tractors & Mowing Attachments)											$ 100,000
New FOD Control Equipment (Street Sweeper/Vacuum)											$ 300,000
New Pavement Deice Truck											$ 300,000
New Operations Trucks											$ 75,000
Ramp Lighting Install Replacement											$ 200,000
Airfield Camera System Installation											$ 200,000
Lear St Rehabilitation											$ 100,000
Gulfstream Dr Rehabilitation											$ 100,000
Cessna Dr Rehabilitation											$ 100,000
New Airport Facilities / Operations Center / ARFF Station (Design & Construction)											$ 5,000,000
New Administrative & Airlines Offices Building (Design & Construction)											$ 4,000,000
Totals Unfunded	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**		**$ 11,975,000**

0' 700' 1,400'

Northern Colorado Regional Airport
Capital Improvement Program (CIP)
2026 - 2030

Federal & State Funding

- **2025-1**: Runway 15-33 Widening - Construction - $17,447,994 (F, F-Disc, S, L)
- **2026-1**: Runway 15-33 Widening - Construction - $1,937,109 (F, F-BIL-23/25/26, S, L)
- **2026-2**: New ATCT - Environmental - $350,000 (F-FCT)
- **2027-1**: New ATCT - Design - $2,000,000 (F-FCT)
- **2027-2**: GA Apron & Taxiways Seal Coat - Design & Construction - $500,000 (S, L)
- **2028-1**: New ATCT - Construction - $15,000,000 (F, F-Disc, F-FCT, S, L)
- NS **2029-1**: ARFF Vehicle Acquisition - $1,500,000 (F, S, L)
- NS **2030-1**: Master Plan w/ Updated Noise Contours - $800,000 (F, S, L)
- **2030-2**: Taxiway A Seal Coat, Lighting & Signage Upgrades - Construction - $2,440,320 (F, F-Disc, S, L)
- **2030-3**: Taxiway D & A1 Rehabilitation - Construction - $300,000 (S, L)

Local Funding Only

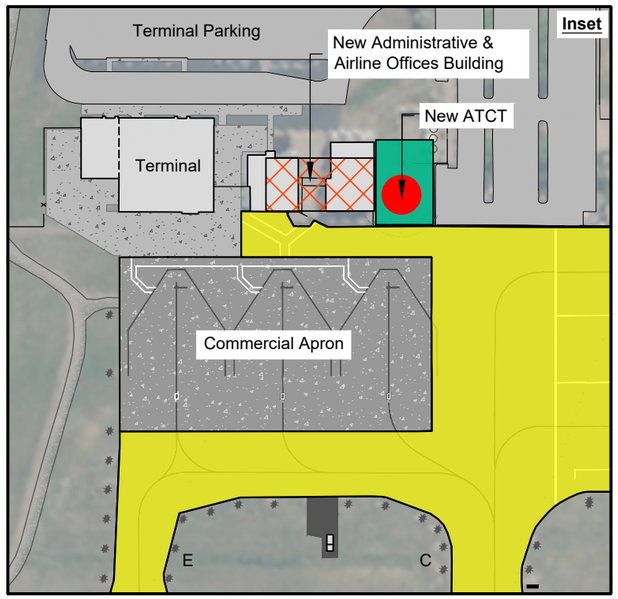
- **2026-3**: New Front Line Parking Lot - Tenant Improvement - $1,000,000 (Other)
- NS **2027-3**: Through The Fence Gate - $300,005 (L)
- **2028-2**: Runway 6-24 & Taxiway F Crack Seal & Seal Coat - Design & Construction - $600,000 (L)
- NS **2028-3**: Landside Wayfinding Signage and Landscaping - $150,000 (L)
- **2028-4**: Terminal Parking Lot Expansion - Design & Construction - $2,000,000 (L)
- **2029-2**: Taxiway A Seal Coat, Lighting & Signage Upgrades - Design - $100,000 (L)
- **2029-3**: T-Hangar Ramp & Stearman Taxilane Rehabilitation - Design & Construction - $600,000 (L)
- NS **2030-4**: Complete VSR - Design & Construction - $500,000 (L)
- **2030-5**: Airport Entrance Road Improvements - Design & Construction - $1,000,000 (L)

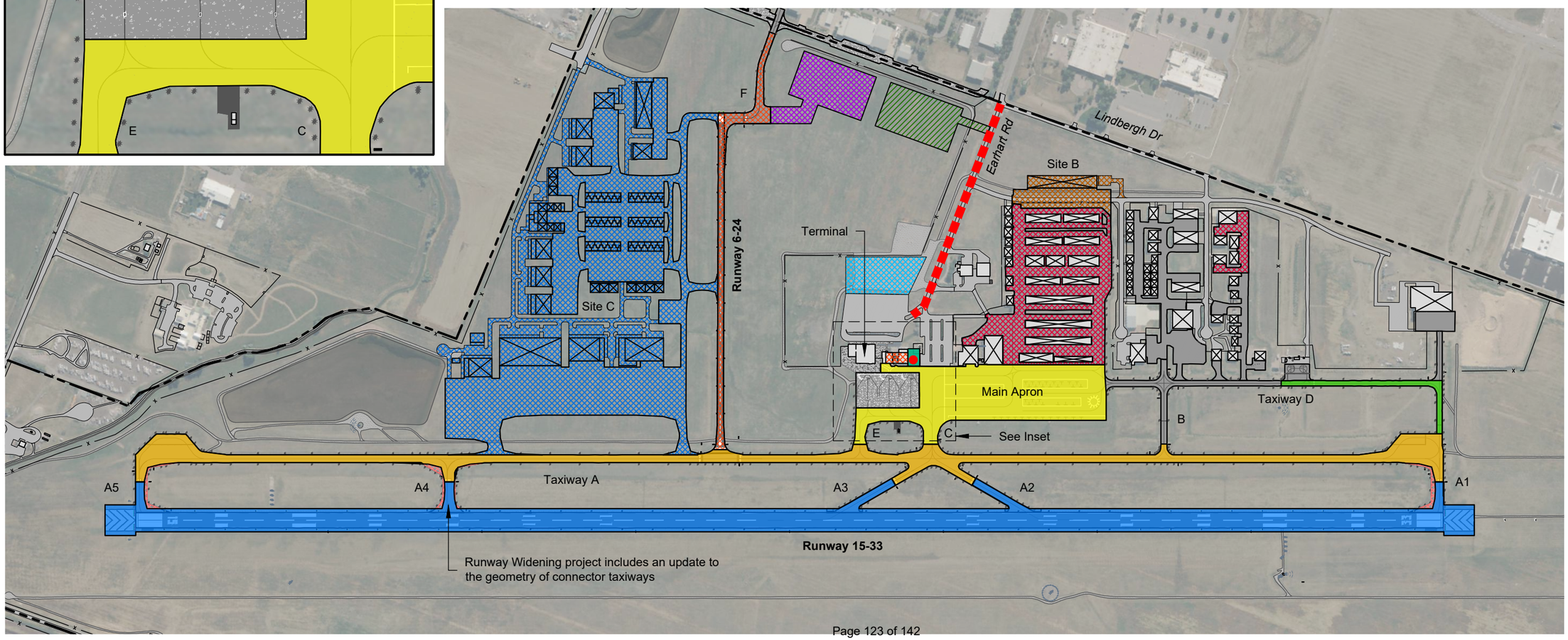
Unfunded Projects

- New Airport Operations Center & ARFF Station - Design & Construction - $5,000,000
- New Administrative & Airline Offices Building - Design & Construction - $4,000,000
- NS Airport Operations Vehicles, Equipment, Landside Roadway Rehabilitations, & Others (See CIP List)

Site Development Projects

- Site B General Aviation Hangar Development
- Site C General Aviation Hangar Development





Legend:

- Existing Facilities
- Future Development
- Existing Property Line

Notes:

- NS: Not Shown
- Funding Types:
  - F: Federal (AIP)
  - F-Disc: AIP Discretionary
  - F-BIL: Bipartisan Infrastructure Law
  - F-FCT: FAA Contract Tower (FCT) Competitive Grant Program
  - S: State
  - L: Local

Not For Construction

D R A F T

Scale based on a 11"x17" sheet.

Northern Colorado Rgnl'
Capital Improvement Program
2026 - 2030 CIP
Date: 06.09.25

NORTHERN COLORADO
REGIONAL AIRPORT
4900 Earhart Rd • Loveland, Colorado 80538
(970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER: 8

MEETING DATE: June 16th, 2025

PREPARED BY: John S. Kinney – Airport Director

TITLE

Revised 2026 Airport Budget Recommendation

RECOMMENDED AIRPORT COMMISSION ACTION

Airport staff is seeking action by the airport commission to a resolution recommending approval of the airport budget of 2026 to both City Councils

SUMMARY

During the Airport Commission's May 15th meeting, a unanimous vote was registered to approve the spending authority of the proposed 2026 airport budget. With this vote, the Commission requested additional information/analysis on revenues, expenses, possible new revenue sources and a comparison of other airports' budgets be brought back to the June 16th special meeting for discussion and action.

Staff have completed this review and will provide specific details as to the greater context of budget for 2025, 2026 and 2027. Including a line-item breakdown of the "draw down" of the airport fund balance by the same years. Along with identifying potential revenue sources the Commission might want to pursue today to balance the 2026 budget and strengthen the airports standing to be financially autonomous from general fund subsidies going forward on a perpetual basis.

ATTACHMENTS

- Airport Financial Comparison
- Airport Financial Forecast 2025-2027
- Airport Fund Balance Summary
- 2026 Proposed Budget Overview
- 2025 Budget Versions
- Resolution #R-8-2025

Airport Financial Comparison

Airport	Annual Revenue	Airport Parking	Land Leases	Fuel	PFC	Rental Cars	Landing Fees	Taxi/Bus Fees	concession Fees	Customs Fees
Colorado Springs	$ 23,461,700.00									
Grand Junction	$ 17,200,000.00	$ 2,353,269.00	$ 731,885.00	$ 472,376.00	$ 2,131,943.00	$ 1,699,330.00				
Rocky Mountain Metropolitan Airport	$ 16,300,000.00	$ 209,466.00	$ 498,573.00	$ 1,350,966.00	**N/A**					
Yampa Valley Regional	$ 11,000,000.00	$ 1,075,650.00			$ 1,125,000.00	$ 1,370,000.00	$ 1,320,000.00	$ 913,980.00	$ 1,850,000.00	
Centennial	$ 10,600,000.00		$ 3,354,410.00	$ 3,956,748.00	**N/A**				$ 325,688.00	$ 482,832.00
Chyenne	$ 6,044,284.00		$ 2,082,150.00	$ 3,420,675.00	$ 180,000.00					
Northern Colorado	$ 2,000,000.00	**$ -**	$ 1,319,783.00	$ 472,500.00		$ 45,000.00	$ 100,000.00			

*** Yampa Valley Regional PFC Charges Estimated**

***Chyenne Regional PFC Charges Estimated**

Airport Financial Forecast 2025-2027				
Account Name	**Worksheet**	**2025 Forecasted**	**2026 Forecasted**	**2027 Forecasted**
Interest On Investments	Airport Revenues	$ 51,450.00	$ 51,450.00	$ 51,450.00
Miscellaneous	Airport Revenues	$ 55,230.00	$ 55,230.00	$ 55,230.00
Badging Fees - 2025 Badging Fee increase		$ 50,000.00	$ 75,000.00	$ 75,000.00
FBO Rent	Airport Revenues	$ 110,809.00	$ 110,809.00	$ 111,000.00
T-Hangar Rental	Airport Revenues	$ 159,000.00	$ 168,000.00	$ 175,000.00
Aeronautical Land Lease	Airport Revenues	$ 473,038.00	$ 497,338.00	$ 521,638.00
Non-Aeronautical Land Lease	Airport Revenues	$ 576,936.00	$ 606,636.00	$ 636,336.00
Parking -Assumption of $2/day	Airport Revenues		$ 258,696.00	$ 258,696.00
Landing Fees - June 2025	Airport Revenues	$ 100,000.00	$ 94,300.00	$ 170,000.00
Terminal Lease	Airport Revenues	$ 5,000.00	$ 5,000.00	$ 5,000.00
Fuel Flowage	Airport Revenues	$ 315,000.00	$ 145,000.00	$ 315,000.00
County Aircraft Fuel Tax	Airport Revenues	$ 157,500.00	$ 87,500.00	$ 157,500.00
Forecasted Total Revenue		**$ 2,053,963.00**	**$ 2,154,959.00**	**$ 2,531,850.00**
Operating Budget		**$ 2,312,093.00**	**$ 2,025,258.00**	**$ 2,126,520.00**
O&M Surplus/Deficit		$ (258,130.00)	$ 129,701.00	$ 405,330.00
2025 Unanticipated Budget Impacts				
Underbudgeted Storm Water Fees	Additional Expense	$ 46,000.00		
2024 Vehicle Purchase	Additional Expense	$ 46,320.00		
2024 TSA Equipment relocation		$ 36,000.00		

Airport Fund Balance		2025		2026		2027
Annual Starting Balance	**$**	**2,200,000.00**	**$**	**484,723.00**	**$**	**-**
Runway Widening Grant Match	$	315,147.00	$	315,147.00	$	-
Mid-Year Appropriations - Fund Balance Draw **	$	642,000.00				
City of Loveland Support Services Expense	$	330,000.00	$	330,000.00	$	330,000.00
Terminal Solar Installation - Fund Balance Draw ***	$	170,000.00				
Budget Deficit	$	258,130.00				
Budget Surplus	$	-	$	129,701.00	$	405,330.00
Annual Ending Balance	**$**	**484,723.00**	**$**	**(30,723.00)**	**$**	**75,330.00**

Airport Fund Balance

* No capital considerations were made for fiscal year 2027

** Mid-Year Appropriations: ATCT Facilities, CIP, Strategic Planning and Development, Air Service Development, Ground Transportation

*** $170,000 Solar Project to Obtain Lead Silver vs The Purchase of ~$7,000 Carbon Credits

Opportunities to Increase Revenue/Reduce Expenditures
*New parking Fess August of 2025
Increase Landing Fees
Increase Fuel Flowage Fees
Institute equitable off airport fees
Raise Terminal Fees reflective of market rates
Reduce consultant fees from mid-year appropriation

Performance Metric: each city contributed $1M to the terminal with the guarantee that schedule service would be delivered in 2027 or 2028....if not the $ 1M from each muni would be returned to each city *

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2026 Proposed Budget Overview

Substantive adjustments have been made to this year's budget as compared to previous years' enhancing airport safety, guest experience and revenues while making substantial reductions in the base budget to meet long-term financial needs.

2025 to 2026 budget changes:

- **Northern Colorado Regional Airport Annual Budget Summary:**
  - Reduction in operating expenses of $286,835.
  - Increase in revenues of $100,966 (after runway closure impacts)
  - No new FTEs are being requested in 2026

- **Increase revenues of $100,966 (after runway closure impacts).**
  - Parking fees
  - Badging fees
  - CPI adjustments are the primary divers for this increase.

- **Line-Item reductions in the following accounts total $286,835:**
  - Professional Services
  - Personnel
  - Advertising
  - Travel and Meetings
  - Repair and Maintenance
  - Motor Fuel
  - Marketing
  - Other Supplies

City of Loveland

Airport (AIR) Post-OpenGov Entry Report

Use this report to ensure revenues and expenditures match what you feel you entered into OpenGov!

	2023 ACTUALS	2024 REVISED	2024 ACTUALS	2025 ADOPTED	2026 PROPOSED	
	FY2023	FY2024	2024	FY2025	FY2026	'26 Proposed / '25 Adopted $
Revenues						
600 - Northern Colorado Regional Airport						
290 - Airport						
0000 - No Program						
38201 - Contributed Assets	$350,000	–	–	–	–	$0
32501 - Federal Grants - Operating	$5,738	–	$0	–	–	$0
32510 - State and Other Grants - Capital	$36,661	–	–	$250,000	–	-$250,000
35315 - Refunds /Rebates	$5	–	–	–	–	$0
0000 - NO PROGRAM TOTAL	**$392,404**	**–**	**$0**	**$250,000**	**–**	**-$250,000**
290 - AIRPORT TOTAL	**$392,404**	**–**	**$0**	**$250,000**	**–**	**-$250,000**
600 - NORTHERN COLORADO REGIONAL AIRPORT TOTAL	**$392,404**	**–**	**$0**	**$250,000**	**–**	**-$250,000**
REVENUES TOTAL	**$392,404**	**–**	**$0**	**$250,000**	**–**	**-$250,000**
Expenses						
600 - Northern Colorado Regional Airport						
290 - Airport						
0000 - No Program						
41015 - Medical Payout	$2,163	$3,250	$2,040	$1,973	$1,973	$0
41541 - Workers' Compensation	$4,761	$6,260	$6,260	$3,142	$3,142	$0
41543 - Insurance Benefits	$110,948	$141,014	$119,099	$182,163	$147,650	-$34,513
41544 - F.I.C.A. Taxes	$43,901	$49,973	$44,422	$71,792	$60,001	-$11,791
41545 - General Pension & Retirement	$25,435	$35,988	$26,900	$35,958	$40,137	$4,179
41001 - Merit Increase Budget	–	$0	–	$30,452	$35,293	$4,841
41011 - Salaries-Benefited Emp	$538,412	$865,933	$561,448	$858,862	$784,329	-$74,533
41012 - Salaries-Non Benefited Emp	$52,638	$35,000	$32,077	$36,750	$36,750	$0
41021 - Overtime-Benefited Emp	$2,915	$10,000	$8,407	$10,500	$20,000	$9,500
41060 - Car Usage	-$726	–	-$669	–	–	$0
41090 - Monetary Award	$152	–	$455	–	–	$0
41095 - Car Allowance	$4,039	–	$323	–	–	$0
41096 - Cell Phone Allowance	$1,798	–	$1,922	–	–	$0
48240 - Machinery & Equipment	–	–	$411,250	–	–	$0
48244 - Motor Vehicle	$416,681	$357,407	$63,943	–	–	$0
49352 - Engineering	$339,447	$1,148,765	$811,345	–	–	$0
49355 - Design/Architect	–	$250,000	$3,200	–	–	$0
49360 - Construction	$5,107,631	$37,476,432	$15,309,013	$18,121,404	–	-$18,121,404

City of Loveland

Airport (AIR) Post-OpenGov Entry Report

Use this report to ensure revenues and expenditures match what you feel you entered into OpenGov!

	2023 ACTUALS	2024 REVISED	2024 ACTUALS	2025 ADOPTED	2026 PROPOSED	
	FY2023	FY2024	2024	FY2025	FY2026	'26 Proposed / '25 Adopted $
49399 - Other Capital	–	$180,000	$0	–	–	$0
44101 - Depreciation Expense	$1,460,176	–	$1,787,906	–	–	$0
43856 - Loss On Disposed Asset	–	–	–	–	–	$0
42334 - Building & Paint Supplies	$1,810	$10,000	$12,890	$10,500	$10,500	$0
42336 - Electrical Parts & Supplies	$7,918	$8,500	$7,359	$8,925	$18,925	$10,000
42337 - Landscape & Ag Supplies	$356	$3,500	$3,497	$3,675	$13,675	$10,000
42422 - Food	$2,454	$3,000	$4,298	$3,150	$3,150	$0
42899 - Other Supplies	$704	$1,250	$1,116	$1,313	$0	-$1,313
42011 - Office Supplies	$2,337	$2,300	$4,319	$2,415	$2,415	$0
42012 - Office Furn/Eq (Non-Cap)	$20	$2,500	$1,199	$2,625	$2,625	$0
42014 - Books & Periodicals	$26	$250	$297	$263	$263	$0
42015 - Computer Supply & Equipmt	$4,845	$4,500	$5,487	$4,725	$4,725	$0
42025 - Clothing	$2,705	$2,500	$2,199	$2,625	$2,625	$0
42030 - Motor Fuel	$20,171	$22,000	$13,565	$23,100	$20,100	-$3,000
42031 - Motor Oil & Lubricants	$549	$500	$641	$525	$1,000	$475
42032 - Parts & Supplies	$38,148	$51,500	$42,812	$54,075	$54,075	$0
42033 - Tools/Equip (Non-Cap)	$7,535	$4,250	$3,864	$4,463	$10,000	$5,537
42039 - Tires & Tubes	$17,307	$6,500	$6,815	$6,825	$6,825	$0
42097 - Safety Supplies	$380	$500	$1,425	$525	$1,000	$475
43265 - Mileage Reimbursement	$78	$500	–	$525	$525	$0
43270 - Travel/Meetings/Schooling	$16,572	$27,000	$30,353	$28,350	$19,000	-$9,350
43021 - Printing	$328	$1,000	$1,571	$1,050	$1,050	$0
43053 - Government Fees	$298	$250	$396	$263	$263	$0
43097 - Lockbox/Cr Card Bank Fees	$957	$1,000	$1,776	$1,050	$1,050	$0
43667 - Utility - Refuse / Mosquito Control	–	–	$233	–	–	$0
43310 - Insurance, Prop/Liab	$21,149	$26,000	$21,149	$27,300	$27,300	$0
43311 - Ins Deductible, Prop/Liab	$0	$2,500	–	$2,625	$2,625	$0
43312 - General Liability	$17,984	$11,751	$22,000	$14,436	$14,436	$0
43534 - Veh/Equip Maint-Internal Svc	$43,163	$40,010	$52,282	$41,210	$42,446	$1,236
43562 - Veh & Equip Maint-Outsourced	$50,092	$3,500	$6,648	$3,675	$3,675	$0
43569 - Repair & Maintenance	$57,255	$100,000	$87,213	$105,000	$150,000	$45,000
43801 - Software	$500	–	$855	–	–	$0
43802 - Software Maintenance	$226	–	$300	–	–	$0

City of Loveland

Airport (AIR) Post-OpenGov Entry Report

Use this report to ensure revenues and expenditures match what you feel you entered into OpenGov!

	2023 ACTUALS	2024 REVISED	2024 ACTUALS	2025 ADOPTED	2026 PROPOSED	
	FY2023	FY2024	2024	FY2025	FY2026	'26 Proposed / '25 Adopted $
43833 - Subscriptions	$1,137	$1,200	$580	$1,260	$6,000	$4,740
43895 - Awards & Recognition	–	$500	$544	$525	$525	$0
43899 - Other Services	$7,364	$227,476	$71,103	$1,000	$150,000	$149,000
43711 - Postage	$681	$1,000	$608	$1,050	$1,050	$0
43737 - Advertising - General	$1,261	$40,000	$763	$42,000	$0	-$42,000
43738 - Marketing	$6,260	$50,000	$13,505	$52,500	$50,000	-$2,500
43775 - Equipment Rental/Lease	$3,835	$3,500	$7,441	$3,675	$10,675	$7,000
43435 - Membership Fees & Dues	$3,699	$5,000	$2,958	$5,250	$5,250	$0
43449 - Employment Screening	–	–	–	–	–	$0
43450 - Professional Services	$315,577	$1,344,658	$860,365	$409,000	$75,000	-$334,000
43645 - Telephone	$4,791	$5,000	$3,943	$5,250	$5,250	$0
43657 - Waste Disposal	$3,955	$6,000	$4,990	$6,300	$6,300	$0
43665 - Utility - Gas	$3,610	$4,500	$4,805	$4,725	$5,725	$1,000
43535 - Veh/Equip Fuel Usage-Internal Svc	$103	$2,031	$253	$2,092	$2,092	$0
43579 - Veh & Equip Rental-Internal Srvc	–	$100	–	$100	$100	$0
43661 - Utility - Water	$819	$2,500	$1,220	$2,625	$2,625	$0
43662 - Utility - Waste Water	$112	$1,500	$1,116	$1,575	$2,075	$500
43663 - Utility - Storm Water	$42,496	$25,660	$70,921	$26,943	$30,943	$4,000
43664 - Utility - Electric	$37,130	$80,000	$69,501	$84,000	$84,000	$0
43666 - Utility - Street Maint/Other Fees	$43,453	$42,000	$38,779	$44,100	$44,100	$0
45999 - Costs Allocated	$23,450	$23,450	$23,450	$26,450	–	-$26,450
41948 - Accrued Vacation Expense	-$32,557	–	$4,896	–	–	$0
49999 - Contra Capital	-$5,863,759	–	-$16,598,750	–	–	$0
0000 - NO PROGRAM TOTAL	**$3,029,652**	**$42,763,158**	**$4,108,890**	**$20,428,629**	**$2,025,258**	**-$18,403,371**
1709 - Airport - FBO Rep and Maint						
43569 - Repair & Maintenance	–	$4,636	–	$4,868	$0	-$4,868
1709 - AIRPORT - FBO REP AND MAINT TOTAL	**–**	**$4,636**	**–**	**$4,868**	**$0**	**-$4,868**
290 - AIRPORT TOTAL	**$3,029,652**	**$42,767,794**	**$4,108,890**	**$20,433,497**	**$2,025,258**	**-$18,408,239**
600 - NORTHERN COLORADO REGIONAL AIRPORT TOTAL	**$3,029,652**	**$42,767,794**	**$4,108,890**	**$20,433,497**	**$2,025,258**	**-$18,408,239**
EXPENSES TOTAL	**$3,029,652**	**$42,767,794**	**$4,108,890**	**$20,433,497**	**$2,025,258**	**-$18,408,239**

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ITEM NUMBER: 8

MEETING DATE: June 16th, 2025

PREPARED BY: John S. Kinney – Airport Director

TITLE

2026 Airport Budget Recommendation

RECOMMENDED AIRPORT COMMISSION ACTION

Airport staff is seeking action by the airport commission to a resolution recommending approval of the airport budget of 2026 to both City Councils

2025 Budget Versions

Account Name	Worksheet	Ledger Type	2025 Commission Approved	2025 COL Approved - OpenGov	2025 Airport Staff Forecasted
Interest On Investments	Airport Revenues	revenues		$ 51,450.00	$ 51,450.00
Miscellaneous - Car Rental	Airport Revenues	revenues	$ 65,230.00	$ 55,230.00	$ 55,230.00
Badging Fees			$ -	$ -	$ 50,000.00
FBO Rent	Airport Revenues	revenues	$ 110,809.00	$ 110,809.00	$ 110,809.00
T-Hangar Rental	Airport Revenues	revenues	$ 159,000.00	$ 159,000.00	$ 159,000.00
Land Lease			$ 1,113,000.00	$ 1,048,974.00	$ 1,049,974.00
Parking -Assumption of $2/day	Airport Revenues	revenues	$ -	$ 200,000.00	???
Landing Fees - June 2025	Airport Revenues	revenues	$ 178,300.00	$ 74,533.00	$ 100,000.00
Terminal Lease	Airport Revenues	revenues	$ 15,000.00	$ 15,000.00	$ 5,000.00
Fuel Flowage	Airport Revenues	revenues	$ 315,000.00	$ 315,000.00	$ 315,000.00
County Aircraft Fuel Tax	Airport Revenues	revenues	$ 157,500.00	$ 157,500.00	$ 157,500.00
Forecasted Total Revenue			**$ 2,113,839.00**	**$ 2,187,496.00**	**$ 2,053,963.00**
Annual O&M Budget			**$ 2,126,128.00**	**$ 1,902,325.00**	**$ 2,312,093.00**
O&M Surplus/Deficit			**$ (12,289.00)**	**$ 285,171.00**	**$ (258,130.00)**
Options to Address Deficit					
New parking Fess August of 2025					
Increase Landing Fees					
Increase Fuel Flowage Fees					
Institute equitable off airport fees					
Raise Terminal Fees reflective of market rates					

RESOLUTION # R-8-2025

A RESOLUTION APPROVING THE REVISED 2026 AIRPORT BUDGET AND RECOMMENDING APPROVAL BY THE CITY COUNCILS OF FORT COLLINS AND LOVELAND

WHEREAS, the City of Fort Collins ("Fort Collins") and the City of Loveland ("Loveland") jointly own and operate the Northern Colorado Regional Airport (the "Airport") pursuant to that Amended and Restated Intergovernmental Agreement for the Joint Operation of the Fort Collins-Loveland Municipal Airport (the "IGA"), dated January 22, 2015, as amended; and

WHEREAS, pursuant to the IGA, the two Cities formed the Northern Colorado Regional Airport Commission ("Commission") and granted the Commission certain authority, including the authority to develop the Airport budget; and

WHEREAS, the two Cities reserved to themselves the authority to approve the annual Airport budget and the authority to approve each Cities' annual contributions to and appropriation of the Airport budget; and

WHEREAS, on May 15, 2025, the Commission reviewed and approved the 2026 Airport Budget for final review and approval by the two City Councils; however, certain figures within the 2026 Airport Budget have been adjusted by Airport staff, and therefore, the staff desired to update the Commission's approval of the revised 2026 Airport Budget (the "Revised 2026 Airport Budget"); and

WHEREAS, Airport staff has prepared the Revised 2026 Airport Budget for fiscal year 2026 and the Commission has reviewed the Revised 2026 Airport Budget, which is attached hereto as "Exhibit A" and incorporated herein; and

WHEREAS, after such review, the Commission approves the Revised 2026 Airport Budget, and recommends approval by the two City Councils along with appropriation of the necessary funds for such Revised 2026 Airport Budget.

NOW THEREFORE BE IT RESOLVED BY THE NORTHERN COLORADO REGIONAL AIRPORT COMMISSION AS FOLLOWS:

Section 1. That the Revised 2026 Airport Budget attached hereto as "Exhibit A" is hereby approved.

Section 2. That the Commission recommends that the Fort Collins City Council and the Loveland City Council each approve the Revised 2026 Airport Budget. The Commission further recommends that the City Councils approve each City's annual contributions to and appropriation of the Revised 2026 Airport Budget.

Section 3. That this Resolution shall be effective as of the date and time of its adoption.

ADOPTED this 16th day of June, 2025.

Jeni Arndt, Chair of the
Northern Colorado Regional Airport Commission

ATTEST:

Secretary

APPROVED AS TO FORM:

Laurie Wilson, Deputy City Attorney

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ITEM NUMBER: 9

MEETING DATE: June 16, 2025

PREPARED BY: John S. Kinney – Airport Director

TITLE

Airport Security Possible Executive Session Pursuant to C.R.S. § 24-6-402(4)(d) to Discuss Specialized Details of Security Arrangements or Investigations Regarding Airport Access Control

RECOMMENDED AIRPORT COMMISSION ACTION

Move to recess into executive session pursuant to C.R.S. §§ 24-6-402(4)(d) and 24-6-402(4)(b) to discuss specialized details of security arrangements or investigations regarding airport security and access control, and, as needed, to receive legal advice regarding such matters.

BUDGET IMPACT

N/A

SUMMARY

The Airport Commission may recess into executive session to discuss matters related to airport security and access control and to receive legal advice as permitted under Colorado open meeting requirements.

ATTACHMENTS

None

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ITEM NUMBER: 10

MEETING DATE: June 16th, 2025

PREPARED BY: Dylan Swanson, Airport Safety, Security and Facilities Manager

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TITLE

Airport Badging Modernization

RECOMMENDED AIRPORT COMMISSION ACTION

Approve Airport Badging Rates and Fee Structure

BUDGET IMPACT

Positive –

SUMMARY

The Northern Colorado Regional Airport is certificated under two critical federal agency programs allowing scheduled and unscheduled flight operations with large aircraft while screening to validate the integrality of the onboard passengers and their belongings within a sterile and restricted areas of an airport. Specifically, the FAA's safety and the TSA's security programs. Today, the TSA's expectations of security actions, management and protocols for FNL are virtually no different than if a legacy airline (United, Delta, American or Southwest airline…) served FNL with 25 daily flights to every major hub airport in the nation. Airports operating under the TSA regulatory framework must be aligned in daily security actions and protocols to mitigate threats regardless of their geographic location.

Today, FNL is a commercial service airport certificated by the FAA and TSA under their respective regulatory programs requiring detailed Security, Safety and Resiliency Plans and adherence to each element. FNL also accommodates all levels of general aviation from training to corporate and specialty aviation users.

What separates FNL from all other airports along the front range - who have much busier general aviation and corporate flight ops like: Centennial, Rocky Mountain, Greely, Longmont, Front Range Space Port - are these two coveted federal certifications only held by FNL, DEN, COS and PUB. Specifically:

1) **FNL being certificated by the FAA under Part 139** - allowing commercial flights (scheduled and/or unscheduled) by aircraft with a seating capacity of greater than 30 seats to be conducted at FNL – including flight diversions from DEN. This Certification is maintained by FNL's adherence to our approved FAA Airport Certification Manual or ACM. The ACM outlines in detail how FNL will specifically meet the regulatory obligations of Part 139 regulations. This program can be summarized as: **FNL's Safety and Resiliency Programs**.

2) **FNL being certificated under TSA's TSR 1542** allowing a scheduled passenger or public charter passenger operation with an aircraft having a passenger seating configuration of 61 or more seats. Or regardless of seats, when passengers are enplaned from or deplaned into a sterile area. Requiring an airport sponsor to have an automate badging system driven by recipients having an operational need for controlled access areas such as Restricted, Sterile and or SIDA (Security Display Identification Area). This TSA Certification is maintained by FNL's adherence to our approved TSA Airport Security Plan or ASP. The ASP outlines in detail how FNL will specifically meet the regulatory obligations of Part 1542 and applicable parts of 1544 and 1546 regulations. This program can be summarized as: **FNL's Security and Threat Mitigation Programs**.

A cornerstone of an airport's security program is airport badging / access control into restricted and sterile areas. The system must be protected and managed at all times allowing only authorized personnel with an operational need access.

Current badging practices at the airport require refinement and adjustments. These pending actions are an expectation of the Transportation Security Administration.

Refinements to the existing badging program will include new automation, record keeping, streamlining the process of applicants, aligning accountability with costs and adherence to TSA requirements. To achieve these program goals, additional fees will be assessed and implemented over a two-year phase to badge holders.

Badging Fees

The scope of revenue opportunities significantly increases with 139 certification compared to non-certificated airports. In mature markets these sources of revenue could include airline fees, fuel flowage fees, parking, PFC's, concessions, non-aeronautical developments... Unlike other commercial service airports, FNL is in the beginning stages of its maturity curve where revenue opportunities are limited. It is industry best practices for airports in developmental phases to establish cost recovery programs for the majority of their cost centers.

FNL's badging fees as they stand today do not cover current staffing, technology and/or capital expenses. The cost to maintain the current access control system in its totality and address future needs is $113,260 annually. This encompasses regular maintenance, emergency maintenance and improvements to the existing badging/access control systems.

KFNL Annual Badging system Cost		
Staff time	$	63,260.00
Management of Badging System		
Badging Supplies/Background Checks	$	17,000.00
Access Control System Maintenance	$	4,000.00
Infrastructure Repairs and Improvements	$	20,000.00
Pavement repairs, card readers...		
Total	**$**	**113,260.00**

Badging Rates and Fees - Phase 1 proposes recovering $50,000 of the $113,260 system cost.

Phase 1

Secure Identification Display Area (SIDA) badge new.....$120

Includes costs for fingerprints, FBI background check, badge, access card, training, & admin

Secure Identification Display Area (SIDA) badge renewal.....$50

Airport Operations Area (AOA) badge new & renewals.....$50

Includes costs for badge, background check, access card, & admin

Secure Identification Display Area (SIDA) & Airport Operations Aera (AOA) Badge Deposit $250

Unreturned Secure Identification Display Area (SIDA) badge and AOA.....$250

To be applied to the business or authorized signatory. Failure to remit fees will result in the ineligibility of the associated business, authorized signatory and/or persons to obtain/maintain airfield access.

First Lost Badge Fee.....$100

Second Lost Badge Fee.....$200

Third Lost Badge Fee.....$300

Security Violation Tier I penalty.....$100

Security Violation Tier II penalty.....$200

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Phase 2 - Phase 2 proposes recovering $75,000 of the $113,260 system cost

Secure Identification Display Area (SIDA) badge new.....$120

Includes costs for fingerprints, FBI background check, badge, access card, training, & admin

Secure Identification Display Area (SIDA) badge renewal.....$75

Airport Operations Area (AOA) badge new & renewals.....$75

Includes costs for badge, background check, access card, & admin

Secure Identification Display Area (SIDA) & Airport Operations Aera (AOA) Badge Deposit $250

Unreturned Secure Identification Display Area (SIDA) badge and AOA.....$250

To be applied to the business or authorized signatory. Failure to remit fees will result in the ineligibility of the associated business, authorized signatory and/or persons to obtain/maintain airfield access.

First Lost Badge Fee.....$100

Second Lost Badge Fee.....$200

Third Lost Badge Fee.....$300

Security Violation Tier I penalty.....$100

Security Violation Tier II penalty.....$200

NORTHERN COLORADO
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Airport Bading Fees Comparison

The airport badging fee comparison study below was conducted with interest in showing how like-type airports recover cost associated with badging fees. The Colorado Springs and Grand Junction airports were the only two airports reflected in this study. These two airports were chosen as comparable airports due to the size and complexity of their systems. The majority of certificated airports within 60 miles or within the state of Colorado were deemed not comparable due to having significantly less complexity within their respective systems and the majority of their badge holders are directly tied to airline operations. Denver International was also not included in this study as it was not deemed to be a comparable airport to Northern Colorado Regional Airport.

Airport Badging Fee Comparison

	AOA	AOA Renewal	Lost	SIDA	SIDA Renewal	Lost	Unreturned	Estimated Badging Revenue
Northern Colorado	$ 25.00	$ 25.00	$ -	$ 120.00	$ 25.00	$ 50-100	$ -	$ 25,000.00
Colorado Springs	$ -	$ -	$ 200.00	$ 45.00	$ -	$ -	$ -	$ 60,000-80,000
Grand Junction	$ 45.00	$ 35.00	$ 200.00	$ 110.00	$ 75.00	$ 50-300	$ 250.00	$ 80,000-$100,000