

Remote Air Traffic Control Tower Project

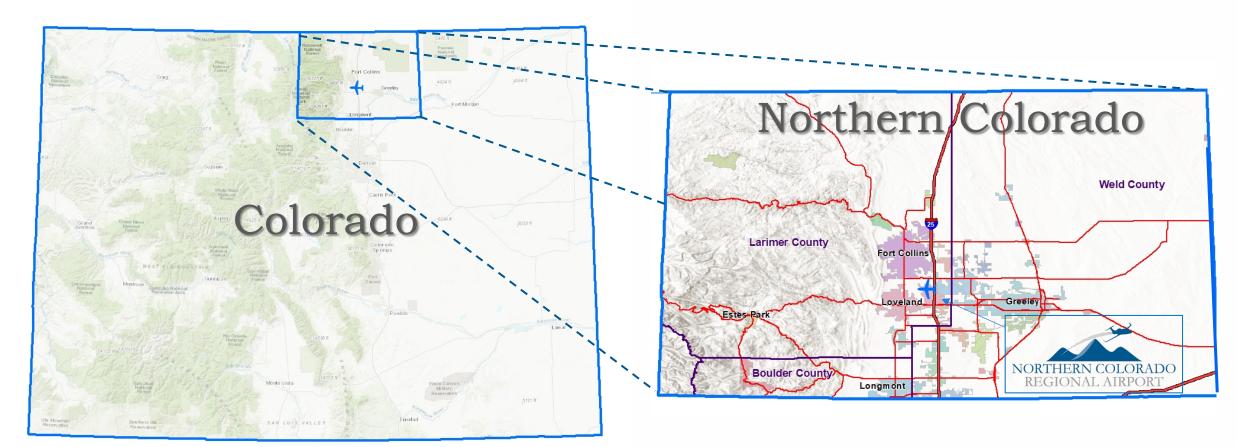


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Northern Colorado

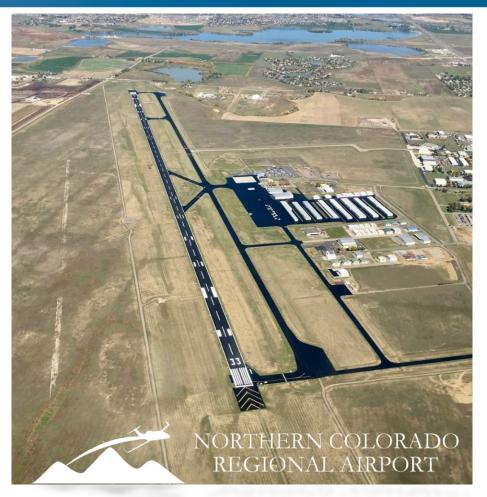




FNL Airport Introduction

- Airport facilities
 - Two runways
 - Primary 8,500' x 100'
 - Crosswind 2,280' x 40'
 - Commercially certified
 - FAA design category C-III
- Aircraft activity supported
 - 95,000 annual operations
 - 85,000 general aviation, piston
 - 9,000 general aviation, turbine
 - 1,000 airline, military, & other
 - 260 based aircraft; 215 hangars





NORTHERN COLORADO REGIONAL AIRPORT

FNL User Diversity

- Private General Aviation
- Flight Training Schools
- Helicopter Fleet Operators
- Corporate Flight
 Departments
- Wildfire Air Tankers
- Medical Transport
- Airline Activities
- Military Aircraft











ATC Need at FNL



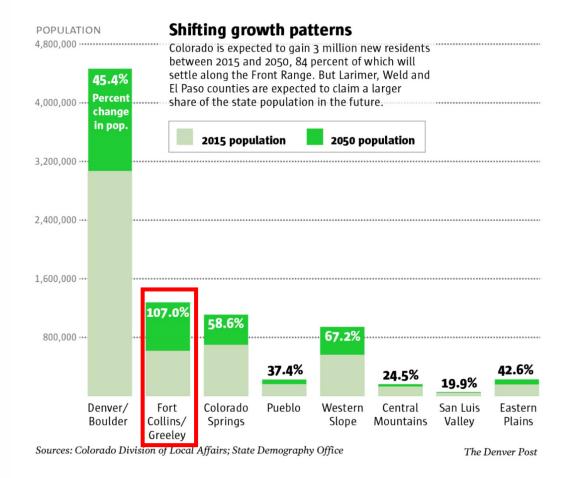
- Northern Colorado Growth
 - Population doubled in past 30 years
 - 690,000 people live within the region
- In 2006 the Downtown Fort Collins Airport (3V5) closed
 - Private Airport located 9 miles away
 - Displaced 127 based aircraft & 4 general aviation businesses to FNL & GXY
- From 2003-2012 Allegiant Airlines operated at FNL
 - Discontinued service citing lack of ATC



ATC Need in Colorado



- 50% of commercial service airports in Colorado do not have ATC
 - Alamosa, Cortez, Durango, Gunnison, Montrose, Steamboat-Hayden, & Telluride
 - Many have seasonal service which would be ideal for part time ATC
- Colorado has and continues to experience high rates of population growth



Colorado Remote Tower Project Milestones



2014	(October 2	015	August 2	2018
Project approved by Colorado Department of Transportation Division of Aeronautics Board & initial funding		Northern Colorado Regional Airport announced as being selected as Colorado test site		Installation begins at FNL	
		•			
FAA begins to wo on Remote Towe Development		Tower	FAA selects S Technologies Tower Systen	Remote	Preliminary system installation completed, begin optimization and initial testing
Ċ	2015		August 201	16	Ovember 2019

The Colorado Remote Tower System

- Components:
 - 31 video cameras mounted on three camera masts
 - 13 screen "video wall"
 - 3 controller workstations
 - 3 screens at each
 - 1 Touchscreen interface
 - 2 Displays for both camera and radar data
 - Electrical redundancies including generator and UPC backup systems



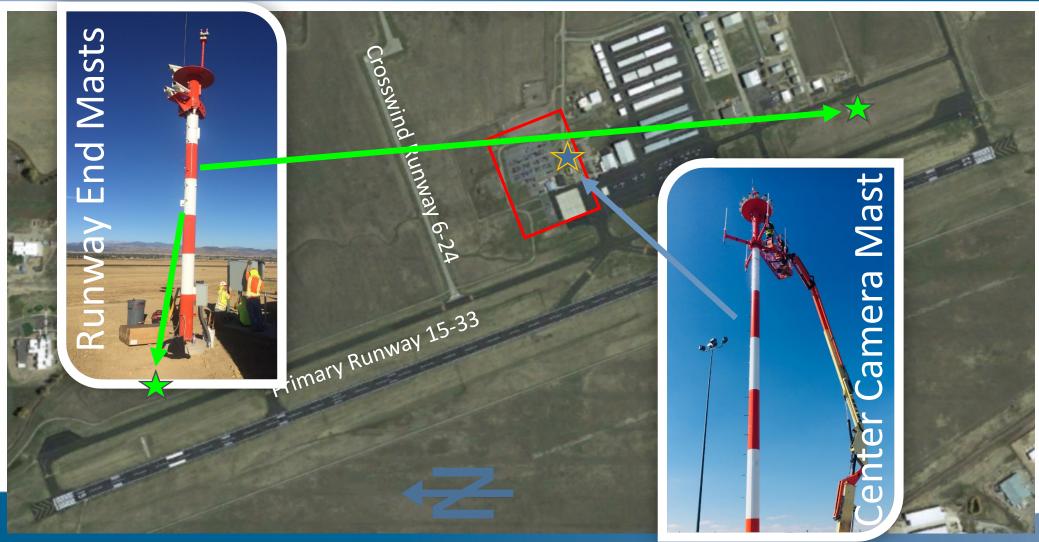






System Component Airfield Locations





System Component Airfield Locations









- Control room
 - 360 view video wall
 - 3 controller positions & camera interface panels
 - Radar
 - Radio
 - Weather information

Colorado Remote Tower Project Timeline



March-Sept	2020 🔘 Q1 2021		TBD 2022	
ATC initialization controller familiarization preliminary evaluation	and Safety		Additional testing phases as needed to define initial operating capabilities for certification	
	•		•	
Tc se is	hase 1 Testing: Mobile ower provides ATC ervices & Remote Tower evaluated Delayed due to COVID	Phase 2 Testin Tower becom ATC & mobile provides safet redundancies	es primary Rei tower Cei	mote Tower System
	all/Winter 2020	Q2 – Q4 20	21 💍 ТВ	D 2022/2023

Remote Tower Advantages



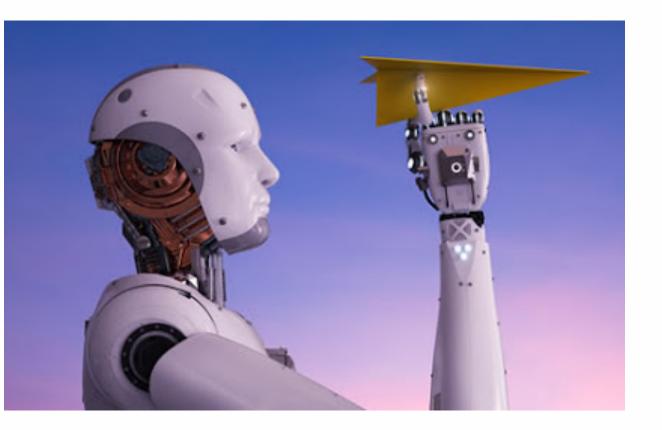
- Cost savings
 - 50% or more for construction
 - 75% on operation and maintenance
 - Scalable to adapt to needs
- "Off the shelf" technology
 - Easy to keep operational
 - Requires no proprietary equipment





Common Misconceptions

- Is not an automated platform for controlling aircraft traffic – or "unmanned"
- Does not replace jobs with technology
- Does not use unproven technology
- Is not more expensive than a traditional tower system
- Is not the answer to all future airport air traffic control needs





How to Follow Progress

- FNL website: <u>www.flynoco.com</u>
- CDOT website:
 <u>www.coloradoremotetower.com</u>
- Social media:
 - www.instagram.com/noco_airport/
 - www.facebook.com/fortloveair
 - www.twitter.com/flynoco





Facility Tour



