CHAPTER 8.

DEVELOPMENT PROGRAM AND NEEDS ASSESSMENT

Introduction

The Capital Improvement Program (CIP) presents the long-term development program for Northern Colorado Regional Airport (FNL or Airport) and establishes a strategy to fund airport improvements by maximizing the potential to receive federal and state matching funds and establishing a financially prudent plan for improvement funding at the local level. The CIP provides a list of the projects identified in the Master Plan and the associated cost estimates. This information serves as a critical planning tool for the Federal Aviation Administration (FAA) in establishing priorities and budgeting expenditures at FNL when compared with the needs of other airports. From the local sponsor's perspective, the CIP identifies improvement needs and allows budgeting/financial decisions to be made with a comprehensive understanding of financial implications.

The overall concept is to maximize opportunities for receiving federal and state matching funds, within the context of and in recognition of the amount of local funds available to support capital needs. While the CIP is utilized by the FAA for programming projects, neither the federal government nor the sponsor are financially obligated to provide funding for the CIP. Should federal matching funds be unavailable for a project during its specified time frame, it is unlikely that local funding will cover its cost and the project will be put on hold until funding becomes available. This chapter introduces the overall structure of the Development Program/CIP and project cost estimates in 2019 dollars, while the next chapter (**Chapter 9 – Financial Implementation Analysis**) provides a more detailed financial analysis and accounts for escalation. The potential improvements necessary to accommodate the future needs at FNL have been placed into three (3) phases according to priority:

- Phase A Short-Term (1-5 years, 2020-2024)
- Phase B Mid-Term (6-10 years, 2025-2029)
- Phase C Long-Term (11-20 years, 2030-2040)

The suggested program for the phasing of these projects is provided in **Table 8-1** through **8-3**. Some projects in the Mid- and Long-Term phases may not be needed unless forecast projections of enplanements and operations are exceeded. However, the projects are still listed as potential future needs should demand be realized. The first three phases of these proposed improvements are illustrated in **Figures 8-1** through **8-3**.

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8.1 Implementation Schedule and Project List

Using the information from previous chapters, including **Chapter 4 – Facility Requirements** and **Chapter 7 – Airport Layout Plan**, a list of capital improvement projects was developed. The proposed projects and phasing of projects are presented in **Table 8-1**, **Table 8-2**, and **Table 8-3**. The Phase A Short-Term project list includes the year each project is programmed for implementation. The phasing and prioritization of Phase B Mid-Term and Phase C Long-Term projects is likely to change as local and federal priorities evolve over time; therefore, the year of implementation is not specified Phase B and C projects.

The details of the Development Program (including a capital improvement project list, project cost estimates, a finalized phasing list, and a financial feasibility analysis) were formulated with consideration of comments and input received from City staff, the FAA, the Colorado Division of Aeronautics, and the Planning & Development Subcommittee (PDSC).

8.2 Cost Estimates

Planning level cost estimates were prepared for projects identified during each phase of the 20-year planning period. The CIP cost estimates presented in this chapter are based on 2019 dollars and do not account for inflation. Inflation of these cost estimates is addressed in the following chapter, **Chapter 9 – Financial Implementation Analysis**. These estimates are intended for planning purposes only; they are not construction cost estimates, which can only be compiled following the preparation of detailed engineering design documents.



Year	Project No.	Project	Estimated Total Cost	
2020	A1	Design and Environmental for De-ice Pad and Tanks, Commercial Apron Expansion & TW E - A320 Design Aircraft	\$	339,207
	A2	Design New Terminal, Supporting Infrastructure, & CATEX (Phase I)	\$	1,200,000
		2020 Annual Subtotal	\$	1,539,207
2021	A3	Construct Commercial Apron Expansion & TW E - A320 Design Aircraft (Phase I)	\$	2,700,000
	A4	Rehabilitate Stearman Taxilane (Design and Construct)	\$	278,000
		2021 Annual Subtotal	\$	2,978,000
	A5	Rehabilitate Northrop Taxilane (Design and Construct)	\$	450,000
2022	A6	Construct New Terminal (Phase I)	\$	12,000,000
	A7	Construct Landside and Roadway Improvements	\$	2,000,000
	A8	Taxiway D Reconstruct and Strengthen All of Taxiway to 30K lbs	\$	1,111,111
	A9	Construct New South GA Ramp	\$	5,700,000
		2022 Annual Subtotal	\$	21,261,111
2023	A10	Design and Construct Seal Coat and Crack Repair for All Existing GA Ramp Areas (Phase I)	\$	500,000
	A11	Design RW 15/33 Widening to 150 feet & Rehab and Lighting & Signage for A- 320 Design Aircraft, Taxiway A Pavement Rehab	\$	1,112,000
	A12	Broom Truck SRE Replacement	\$	700,000
		2023 Annual Subtotal	\$	2,312,000
2024	A13	Construct RW 15/33 widening to 150 feet & Rehab and Lighting & Signage for A- 320 Design Aircraft, Taxiway A Pavement Rehab	\$	13,000,000
		2024 Annual Subtotal	\$	13,000,000
		Phase A (2020-2024) Total	\$	41,090,318

Table 8-1: Phase A (0-5 years) Development Plan Project Costs



Years	Project No.	Project	Estimated Total Cost	
	B1	Fuel Farm Relocation (Design, Environmental, and Construct)	\$	440,000
	B2	Commercial Apron Maintenance	\$	520,000
	В3	Extend Portions of Lindbergh Rd. for Connection to Hangar Development and Extend Cessna St. to Lindbergh Dr.	\$	4,240,000
	B4	Rehab Existing ARFF Truck	\$	140,000
	B5	Reconstruct Taxiway B and Ramp Rehabilitation/Reconstruction, Including Drainage Improvements	\$	1,877,800
	B6	Terminal Parking Reconstruction and Expansion (Phase II)	\$	3,600,000
	B7	Construct De-ice Pad and Tanks, Commercial Apron Expansion & TW E - A320 Design Aircraft (Phase II)	\$	1,361,059
	B8	Runway 6/24 Seal Coating & Pavement Maintenance	\$	400,000
	В9	Remote Tower Permanent Facility 50 feet x 50 feet Building Plus Vehicle Parking	\$	990,000
	B10	High Speed Runway Broom Replacement	\$	750,000
	B11	Terminal Expansion Design and Supporting Infrastructure (Phase II)	\$	1,000,000
	B12	Six E-Charging Stations for Aircraft	\$	952,200
	B13	Demo Two Rows of T-Hangars and Construct 2 Large Corporate Hangars	\$	4,480,000
2025-	B14	Construct Phase I ADG I T-Hangars with Restroom and Apron	\$	4,340,000
2029	B15	Reconstruct and Widen Piper Taxilane (Dual Parallel Taxilane to GA Hangars SE) Including Drainage and Utility Modification/Relocation, and Close Grumman Taxilane	\$	2,060,000
	B16	Terminal Access Loop Road and Terminal Parking Expansion (Phase II)	\$	6,030,000
	B17	Terminal Expansion (Phase II)	\$	8,000,000
	B18	SRE Equipment Replacement	\$	560,000
	B19	Easement Acquisition for RW 15 RPZ	\$	290,000
	B20	SRE Equipment Replacement	\$	400,000
	B21	Reconstruct West Half of Stearman Taxilane (Design and Construct)	\$	400,000
	B22	Reconstruct Northrop Taxilane (Design and Construct)	\$	1,325,000
	B23	New FBO Building & Hangar (Private)	\$	4,360,000
	B24	Reconstruct Runway 6/24, 40 feet by 2,273 feet	\$	1,920,000
	B25	Expand Commercial Apron to the North with New Connector, Concrete (Phase II)	\$	2,940,000
	B26	Phase II ADG I T-Hangars (SE) with Apron - One Row of T's and Associated Taxilanes	\$	3,140,000
	B27	Taxiway F (parallel to 6/24) (Design and Construct)	\$	2,800,000
	B28	RW 15 MALS Approach Lighting & Procedure Improvements	\$	4,800,000
		Phase B (2025-2029) Total	\$	64,116,059

8-2: Phase B (6-10 years) Development Plan Project Costs



Years	Project No.	Project	Estimated Total Cost	
	C1	Relocate Northside Drainage and Northside Apron Earthwork, and Construct Rockwell Ave Extension to Northside GA Apron Area	\$	2,460,000
	C2	Taxiway A 4 Extension and Phase I GA Northside Ramp Expansion	\$	3,340,000
	C3	Reconstruct Taxiway A, A320 Design Aircraft	\$	16,050,000
	C4	Phase II North GA Apron Expansion and Connector Taxiway	\$	2,950,000
	C5	Terminal Access Loop Road, Reconstruction and Expansion (Phase III)	\$	730,000
	C6	Terminal Parking, Reconstruction and Expansion (Phase III)	\$	6,020,000
	C7	Environmental Assessment for Runway 15/33 Extension	\$	450,000
	C8	Runway 15/33 Extension and Taxiway A Extension - 1,000 feet to the South	\$	6,260,000
2030-	C9	Expand GA Apron to the South	\$	2,510,000
2030-	C10	Reconstruct FBO Facilities	\$	3,330,000
	C11	Acquire SRE Replacements	\$	2,150,000
	C12	Rehabilitate Cessna Dr. and Gulfstream Ct.	\$	1,710,000
	C13	Runway 15/33 Rehab	\$	8,750,000
	C14	GA Apron Rehab	\$	3,000,000
	C15	Commercial Apron Rehab	\$	1,830,000
	C16	West Side Access Road	\$	2,110,000
	C17	Land Acquisition, Parcels 8 and 9	\$	3,220,000
	C18	Master Plan Update	\$	750,000
	C19	Acquire New ARFF Truck	\$	680,000
		Phase C (2030-2040) Total	\$	68,300,000

Table 8-3: Phase C (11-20 years) Development Plan Project Costs

Phase A, B, and C Total \$ 173,506,377



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8.5

8.3 Capital Improvement Program

To assist the FAA's effort to provide grant funding to the most needed projects, FNL maintains an up to date Airport Capital Improvements Program (ACIP) and provides this to the FAA annually. This document is similar in format to **Table 8-1** through **8-3**. The proposed project list, phasing, and cost estimates in the AICP serves to provide a progressive projection of capital needs, which can then be utilized in local and federal financial programming. The project list and priorities inevitably change from year to year, so it is important to recognize that the project lists presented in this Master Plan will soon become outdated. As a result, these project lists will differ from the Airport's current five-year ACIP on file with the FAA.

8.4 Phasing Plan

Figure 8-1 through **8-3** illustrate the suggested phasing for the proposed improvement projects throughout the 20-year planning period. These phasing plans represent a suggested project timeline, but it may be necessary to stray from this schedule especially during the latter phases of the planning period. Phase I projects are primarily critical improvements projects needed at the Airport for the reintroduction of commercial air carrier service. The primary factors influencing the timing of project implementation, especially in Phases B and C, include the demand for certain facilities and projects and the economic feasibility. It is important to provide adequate lead-time for detailed planning and construction of these Mid- and Long-Term projects in order to accommodate and keep up with aviation demand. Some considerations in developing the project phasing plan include minimizing disruptive scheduling to avoid making a portion of the facility inoperative due to construction, and preventing extra costs resulting from improper project scheduling.





Project Figure 8-1 Phasing Plan - Phase A

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Project Figure 8-2 Phasing Plan - Phase B

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Project Figure 8-3 Phasing Plan - Phase C

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8.5 Financial Plan and Implementation Strategy

Funding sources for the Capital Improvement Program depend on many factors, including Airport Improvement Program (AIP) project eligibility and availability of AIP funds, the ultimate type and use of facilities to be developed, debt capacity of the Airport, the availability of other financing sources, and the priorities for scheduling project completion. The cost estimates presented in this chapter serve as the basis for the detailed financial analysis in **Chapter 9 – Financial Implementation Analysis**, which outlines the potential CIP project financing options. In Chapter 9, the cost estimates will include an escalation factor.

8.6 Summary

In the case that aviation demand continues to indicate improvements are needed, and if the proposed improvements prove to be environmentally acceptable, the capital improvement financial implications discussed in this chapter are likely to be acceptable for the FAA and the Cities of Fort Collins and Loveland. It must be recognized; however, that this is only a programming analysis and not a commitment on the part of the Sponsor or the FAA. If the cost of an improvement project is not financially feasible, it will not be implemented.

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