

Building an Effective Capital Improvement Plan

South Dakota Airport Conference

Rapid City, SD

March 2020



ENGINEERING, REIMAGINED

Building an Effective Capital Improvement Plan

WHAT ?

WHY ?



HOW ?

WHEN?

Building an Effective Capital Improvement Plan

Question: WHAT is an Airport Capital Improvement Plan (ACIP)?

Answer:

A plan that identifies capital improvements necessary to maintain and operate your airport in a safe and effective manner.

Note:

FAA ACIPs usually show only federally eligible improvements.

Tools:

FAA Order 5090.5, “Formulation of the NPIAS and ACIP”

FAA Order 5100.38, “Airport Improvement Program Handbook”

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Building an Effective Capital Improvement Plan

Question: WHY do I need an effective CIP?



Answer: MONEY, MONEY, MONEY!

Building an Effective Capital Improvement Plan

Question: WHY do I need an effective CIP?



Answer 1: Help FAA process grants!

Answer 2: Never hurts to make FAA happy!

Building an Effective Capital Improvement Plan

Question: WHEN do I need to have a CIP ready?

Answer:

Continuously maintain a list of capital investment needs.

Early Summer – Work with your consultant to refine CIP

- Define
- Prioritize
- Estimate costs

Summer – Meet with FAA and State to discuss CIP

Fall/Early Winter – Finalize and submit to State and FAA

Building an Effective Capital Improvement Plan

Question: HOW do I create an effective CIP?

Answer: Format - FAA/State doesn't currently define format so may vary by airport.

AIRPORT NAME: Ray Kolb Field/Lemmon Municipal Airport		NPIAS/CIP		NPIAS NO.: 46-0027		SITE NO.:			
ASSOCIATED CITY: Lemmon, South Dakota		LOCAL IDENT: LEM		SMA NO.:					
COUNTY NAME: Perkins									
COUNTY CODE:									
	BASED AIRCRAFT	SCHEDULED SERVICE ANNUAL ENPLACEMENTS	SCHEDULED SERVICE ANNUAL OPERATIONS	AIR FAO ANNUAL ENPLACEMENTS	MAIL SERVICE (T OR N)	AIRPORTS ANNUAL INTENSIVE OPERATIONS	AIRPORTS ANNUAL TOTAL OPERATIONS	PROPOSED NEW RUNWAYS	PROPOSED NEW RUNWAY EXTENSIONS
CURRENT:	9					300	4,820		
1 TO 5 YEARS:									
6 TO 10 YEARS:									
ITEM NO.	11EM UNLNHP PLAN	YULN	TOTAL KVA (MAILED L2LN)	FAA SHARE (%) (SHOWN)	SPORDON SHARE (%) (SHOWN)	STATE SHARE (%) (SHOWN)	Remarks		
1	Phase 1. Install Fuel System (Jet A & 100LL) and Card Reader - Design	2020	70,000	63,000	3,000	3,500			
2	Phase 2. Install Fuel System (Jet A & 100LL) and Card Reader - Construction	2021	400,000	360,000	20,000	20,000			
3	Entitlement Carryover	2022	-	-	-	-			
4	ALPMP Update	2023	300,000	270,000	15,000	15,000	Last ALP Update in 2004		
5	Entitlement Carryover	2024	-	-	-	-			
6	Phase 1. Apron and Hanger Taxiway Reconstruction - Design	2025	100,000	90,000	5,000	5,000			
7	Phase 2. Apron and Hanger Taxiway Reconstruction - Construction	2026	1,500,000	1,350,000	75,000	75,000			
8	Entitlement Carryover	2027	-	-	-	-			
Total Project Costs			\$ 2,370,000	\$ 2,133,000	\$ 119,500	\$ 119,500			
2020 Total			\$ 70,000	\$ 63,000	\$ 3,000	\$ 3,500			
2021 Total			\$ 400,000	\$ 360,000	\$ 20,000	\$ 20,000			
2022 Total			\$ -	\$ -	\$ -	\$ -			

CIP	Project	FAA Priority	2020			2021			2022			1-31-2023	31-31-2023
			Estimate	State Appropriation	Shortfalls	Estimate	State Appropriation	Shortfalls	Estimate	State Appropriation	Shortfalls		
Planning	Item 1 01 Environmental Design		100,000										
Design	Design Professional Fees		57,000										
Construction	Item 2 02 Acquire SRE Broom Unit						500,000						
Acquire	Item 3 03 Acquire SRE Broom Unit					1,400,000							
Design and Construction	Item 4 04 Acquire SRE Broom Unit					100,000							
Design and Construction	Item 5 05 Acquire SRE Broom Unit					200,000	1,000,000	90,000					
Design and Construction	Item 6 06 Acquire SRE Broom Unit					100,000							
Design and Construction	Item 7 07 Acquire SRE Broom Unit					100,000							
Design and Construction	Item 8 08 Acquire SRE Broom Unit					100,000							
Design and Construction	Item 9 09 Acquire SRE Broom Unit					100,000							
Design and Construction	Item 10 10 Acquire SRE Broom Unit					100,000							
Design and Construction	Item 11 11 Acquire SRE Broom Unit					100,000							
Design and Construction	Item 12 12 Acquire SRE Broom Unit					100,000							
Design and Construction	Item 13 13 Acquire SRE Broom Unit					100,000							
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Design and Construction	Item 49 49 Acquire SRE Broom Unit					100,000							
Design and Construction	Item 50 50 Acquire SRE Broom Unit					100,000							

Rapid City Regional Airport Capital Improvement Program (AIP*)
As of February 20, 2020

Proj #	Description	FAA AIP	State	RAP
PROJECT YEAR 2019				
5283	Term Rehab Phs 2 Vertical Circulation Terminal (Construction)	\$ 2,944,300	\$ 147,215	\$ 147,215
5283	Term Rehab Phs 2 Vertical Circulation (CA/CO)	\$ 420,101	\$ 21,005	\$ 21,005
5273	Term Rehab Phs 2 Chiller Replacement (Construction)	\$ 317,741	\$ 16,888	\$ 16,888
5273	Term Rehab Phs 2 Chiller Replacement (CA/CO)	\$ 40,007	\$ 2,400	\$ 2,400
5286	GA Access Road (Design/Bid)	\$ 118,169	\$ 5,908	\$ 5,908
5287	RTR Access Road (Design/Bid)	\$ 75,000	\$ 3,750	\$ 3,750
5284	Rehabilitate Taxiway-Rwy 14/32 Hold Lines/Signage (Design/Bid)	\$ 45,124	\$ 2,256	\$ 2,256
5287	Acquire SRE Broom Unit (Specs/Bid)	\$ 17,225	\$ 861	\$ 861
5271	Term Rehab Phs 3 Ticket Counter/Queueing Area (Design/Bid)	\$ 1,006,937	\$ 50,347	\$ 50,347
5283	Term Rehab Phs 3 Replace 2 Jet Bridges (Design/Bid)	\$ 30,000	\$ 1,500	\$ 1,500
5291	Master Plan Update	\$ 624,956	\$ -	\$ 624,956
NA	Grant Administration, legal, advertise, etc.	\$ 41,967	\$ 2,098	\$ 2,098
Total Projects		\$ 5,930,913	\$ 4,355,001	\$ 878,234
		\$ 5,930,913	\$ 4,355,001	\$ 878,234
PROJECT YEAR 2020				
5279	Sanitary Sewer Line/Lagoon (Design)	\$ 470,000	\$ 23,500	\$ 23,500
5287	Rehab Taxiway-Rwy 14/32 Hold Lines/Signage (Construction)	\$ 260,000	\$ 12,500	\$ 12,500
5283	Term Rehab Phs 3 Replace 2 Jet Bridges (Construction)	\$ 2,222,222	\$ 111,111	\$ 111,111
5287	Acquire SRE Broom Unit (Acquire)	\$ 600,000	\$ 40,000	\$ 40,000
5273	Term Rehab Phs 2 Chiller (Design)	\$ 46,347	\$ 2,312	\$ 2,312
NA	Grant Administration, legal, advertise, etc.	\$ 10,000	\$ 500	\$ 500
Total Projects		\$ 3,789,469	\$ 3,418,923	\$ 689,923
		\$ 3,789,469	\$ 3,418,923	\$ 689,923
PROJECT YEAR 2021				
TBD	GA Redevelopment (Design)	\$ 350,000	\$ 17,500	\$ 17,500
5279	Sanitary Sewer Line/Lagoon (Constr/CA/CO)	\$ 1,260,444	\$ 63,022	\$ 63,022
TBD	Term Rehab-Exp - Concourse Addition/Apron (Design)	\$ 2,000,000	\$ -	\$ -
5287	RTR Access Road (Construction)	\$ 1,000,000	\$ 50,000	\$ 50,000
NA	Grant Administration, legal, advertise, etc.	\$ 10,000	\$ 500	\$ 500
Total Projects		\$ 4,220,444	\$ 2,184,444	\$ 2,210,900
		\$ 4,220,444	\$ 2,184,444	\$ 2,210,900
PROJECT YEAR 2022				
5271	Term Rehab Phs 3 Ticket Counter/Queueing Area (Constr/CA/CO)	\$ 6,500,000	\$ 325,000	\$ 325,000
TBD	Term Rehab-Exp - Concourse Addition/Apron (Constr/CA/CO)	\$ 20,000,000	\$ -	\$ -
5286	GA Access Road (Construction, CA/CO)	\$ 1,036,400	\$ 51,820	\$ 51,820
NA	Grant Administration, legal, advertise, etc.	\$ 10,000	\$ 500	\$ 500
Total Projects		\$ 27,546,400	\$ 24,796,860	\$ 2,717,950
		\$ 27,546,400	\$ 24,796,860	\$ 2,717,950
PROJECT YEAR 2023				
TBD	GA Redevelopment (Construction, CA/CO)	\$ 2,250,000	\$ 112,500	\$ 112,500
NA	Grant Administration, legal, advertise, etc.	\$ 10,000	\$ 500	\$ 500
Total Projects		\$ 2,260,000	\$ 2,634,000	\$ 2,690,000
		\$ 2,260,000	\$ 2,634,000	\$ 2,690,000

*Subject to Change Based on Available Funding

Building an Effective Capital Improvement Plan

Question: HOW do I create an effective CIP?

Answer:

**Provide clear description of project
(Maps depicting projects are helpful)**

Mill and replace 2" of asphalt on Runway 13/31

Reconstruct Runway 13/31

Acquire 13.2 acres of land

Install new PAPI on Runway 31

Install new MIRL and replace associated regulator(s)

Acquire new snowblower to replace 1972 snowblower



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Question: HOW do I create an effective CIP?

Answer:

Define realistic funding plan

- Don't use more entitlements than available.
- Discretionary request should be coordinated with FAA
- State Apportionment and state match request should be coordinate with State

Ensure projects are shown on approved ALP



Building an Effective Capital Improvement Plan

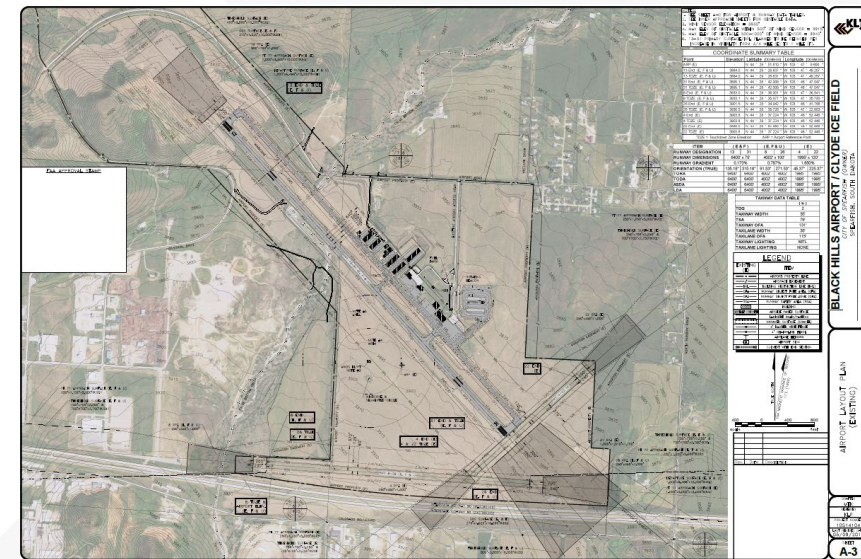
Question: HOW do I create an effective CIP?

Answer:

Confirm timing is clear and considers prerequisites

- Planning completed?
- Received environmental clearances?
- Have local share?
- Design completed or will be?

Ensure projects are shown on ALP



Building an Effective Capital Improvement Plan

Question: HOW do I create an effective CIP?

Answer:

Clear need – Projects must be justified

- Project must meet not exceed FAA standards.
- Replacement/rehabilitation must be warranted and met useful life expectancy defined in FAA Order 5100.38.



Building an Effective Capital Improvement Plan

Common Mistakes

Lumping projects together

Rehabilitate RTA

Rehabilitate airfield lighting

Unrealistic funding

\$750,000 in non-primary entitlements

Identify the use of State Apportionment without State input

Identify the use of Discretionary funds without FAA input



Why Effective CIP and Airport Planning are needed?



An ineffective CIP can lead to an undesirable destination

With that happy thought, who has the first question?

