

Appendix L: CIP COST ESTIMATES

Airport Master Plan Update

Aurora State Airport

Aurora State Airport CIP 2012 - 2032

#	Year Description	Total Cost	ODA share	FAA Share	Private Share	Other Funding
Phase I (2012-2016)						
1	2012 Construct ATCT ¹	\$ 3,369,000.00	\$ 673,800.00	\$ -	\$ -	\$ 2,695,200.00
2	2012 Service Road	\$ 1,017,000.00	\$ 50,850.00	\$ 966,150.00	\$ -	\$ -
3	2013 PMP (2013) ²	\$ 27,000.00	\$ 20,250.00	\$ 6,750.00	\$ -	\$ -
4	2014 Helicopter Landing Pads	\$ 11,000.00	\$ 550.00	\$ 10,450.00	\$ -	\$ -
5	2014 Ramp Reconstruction - State Leased	\$ 988,000.00	\$ 49,400.00	\$ 938,600.00	\$ -	\$ -
6	2014 Taxilane Development (Hangar Access)	\$ 43,000.00	\$ -	\$ -	\$ 43,000.00	\$ -
7	2015 Hangar Development	\$ 2,088,000.00	\$ -	\$ -	\$ 2,088,000.00	\$ -
8	2015 Carryover Entitlements (ODA)	\$ -	\$ -	\$ -	\$ -	\$ -
9	2016 Environmental Assessment (Runway Improvements)	\$ 350,000.00	\$ 17,500.00	\$ 332,500.00	\$ -	\$ -
10	2016 PMP (2016)	\$ 27,000.00	\$ 20,250.00	\$ 6,750.00	\$ -	\$ -
	<i>Phase I Subtotal</i>	<i>\$ 7,920,000.00</i>	<i>\$ 832,600.00</i>	<i>\$ 2,261,200.00</i>	<i>\$ 2,131,000.00</i>	<i>\$ 2,695,200.00</i>
Phase II (2017-2021)³						
11	2017 Aurora RFPD Response Facility	\$ 570,000.00	\$ -	\$ -	\$ 570,000.00	\$ -
12	2017 Carryover Entitlements (ODA - complete EA)	\$ -	\$ -	\$ -	\$ -	\$ -
13	2018 Property Acquisition (R17 Displaced Threshold)	\$ 102,000.00	\$ 5,100.00	\$ 96,900.00	\$ -	\$ -
14	2018 Avigation Easement Acquisition (R17 RPZ)	\$ 44,000.00	\$ 2,200.00	\$ 41,800.00	\$ -	\$ -
15	2019 Carryover Entitlements (In preparation of runway project)	\$ -	\$ -	\$ -	\$ -	\$ -
16	2020 Displaced Threshold (R17 - 800')	\$ 1,980,000.00	\$ 99,000.00	\$ 1,881,000.00	\$ -	\$ -
17	2020 Install Runway 17-35 PAPIs	\$ 129,000.00	\$ 6,450.00	\$ 122,550.00	\$ -	\$ -
18	2020 R17 Run-Up Area	\$ 355,000.00	\$ 17,750.00	\$ 337,250.00	\$ -	\$ -
19	2018 Property Acquisition (R35 RPZ)	\$ 2,561,000.00	\$ 128,050.00	\$ 2,432,950.00	\$ -	\$ -
20	2019 Keil Road Relocation	\$ 1,427,000.00	\$ 71,350.00	\$ 1,355,650.00	\$ -	\$ -
21	2020 Runway Extension (R35 - 1000')	\$ 3,035,000.00	\$ 151,750.00	\$ 2,883,250.00	\$ -	\$ -
22	2020 Install Runway 17 PAPIs	\$ 65,000.00	\$ 3,250.00	\$ 61,750.00	\$ -	\$ -
23	2019 PMP (2019)	\$ 27,000.00	\$ 20,250.00	\$ 6,750.00	\$ -	\$ -
24	2019 Taxilane Development (Hangar Access)	\$ 43,000.00	\$ -	\$ -	\$ 43,000.00	\$ -
25	2020 R17/35 Strengthening Overlay	\$ 2,052,000.00	\$ 102,600.00	\$ 1,949,400.00	\$ -	\$ -
26	2021 Hangar Development	\$ 2,088,000.00	\$ -	\$ -	\$ 2,088,000.00	\$ -
27	2021 Master Plan Update	\$ 200,000.00	\$ 10,000.00	\$ 190,000.00	\$ -	\$ -
	<i>Phase II Displaced Threshold Subtotal</i>	<i>\$ 7,590,000.00</i>	<i>\$ 263,350.00</i>	<i>\$ 4,625,650.00</i>	<i>\$ 2,701,000.00</i>	<i>\$ -</i>
	<i>Phase II Runway Extension Subtotal</i>	<i>\$ 12,068,000.00</i>	<i>\$ 487,250.00</i>	<i>\$ 8,879,750.00</i>	<i>\$ 2,701,000.00</i>	<i>\$ -</i>
Phase III (2022-2031)						
28	PMP (2022, 2025, 2028, 2031)	\$ 108,000.00	\$ 81,000.00	\$ 27,000.00	\$ -	\$ -
29	Apron Development	\$ 1,638,000.00	\$ 81,900.00	\$ 1,556,100.00	\$ -	\$ -
30	Taxilane Development (Hangar Access)	\$ 43,000.00	\$ -	\$ -	\$ 43,000.00	\$ -
31	Hangar Development	\$ 2,088,000.00	\$ -	\$ -	\$ 2,088,000.00	\$ -
32	Cargo Apron	\$ 198,000.00	\$ 9,900.00	\$ 188,100.00	\$ -	\$ -
33	Relocate Fuel Tanks	\$ 89,000.00	\$ 4,450.00	\$ 84,550.00	\$ -	\$ -
34	R17 Run-Up Area ⁴	\$ 355,000.00	\$ 17,750.00	\$ 337,250.00	\$ -	\$ -
	<i>Phase III Subtotal</i>	<i>\$ 4,519,000.00</i>	<i>\$ 195,000.00</i>	<i>\$ 2,193,000.00</i>	<i>\$ 2,131,000.00</i>	<i>\$ -</i>
Total Capital Costs with Displaced Threshold Option		\$ 20,029,000.00	\$ 1,290,950.00	\$ 9,079,850.00	\$ 6,963,000.00	\$ 2,695,200.00
Total Capital Costs with Runway Extension Option		\$ 24,507,000.00	\$ 1,514,850.00	\$ 13,333,950.00	\$ 6,963,000.00	\$ 2,695,200.00

Displaced Threshold

¹ Other Funding is Connect Oregon III Grant
² ODA share for PMP is 75% of total cost
³ Items 13-18 or Items 19-22 to be implemented, pending FAA determination
⁴ If no displaced threshold project; construct R17 run-up at same time as fuel tank relocation project.

Aurora State Airport
Proposed Capital Improvement Projects

	Project Description	Total Cost	Funding Source		
			ODA (5%)	FAA* (95%)	Private
A	Property Acquisition (Runway 17 Displaced Threshold)	\$ 102,000	\$ 5,100	\$ 96,900	
B	Property Acquisition (Runway 35 RPZ)	\$ 2,561,000	\$ 128,050	\$ 2,432,950	
C	Avigation Easement Acquisition (Runway 17 RPZ)	\$ 44,000	\$ 2,200	\$ 41,800	
D	Displace Runway 17 Threshold (800')	\$ 1,980,000	\$ 99,000	\$ 1,881,000	
E	Runway 35 Extention (1000')	\$ 3,035,000	\$ 151,750	\$ 2,883,250	
F	Runway 17 Runup	\$ 355,000	\$ 17,750	\$ 337,250	
G	Keil Road Relocation	\$ 1,427,000	\$ 71,350	\$ 1,355,650	
H	Apron Development	\$ 1,638,000	\$ 81,900	\$ 1,556,100	
I	Aurora RFPD Response Facility	\$ 570,000	\$ -	\$ -	\$ 570,000
J	Cargo Apron	\$ 198,000	\$ 9,900	\$ 188,100	
K	Construct ATCT	\$ 3,369,000	\$ 168,450	\$ 3,200,550	
L	Taxilane Development (Hangar Access)	\$ 43,000	\$ 2,150	\$ 40,850	
M	Hangar Development	\$ 2,088,000	\$ -	\$ -	\$ 2,088,000
N	Helicopter Landing Pads	\$ 11,000	\$ 550	\$ 10,450	
O	Install Runway 17 PAPIs	\$ 65,000	\$ 3,250	\$ 61,750	
P	ODA Pavement Maintenance Program 2013/2016	\$ 27,000	\$ 20,250	\$ 6,750	
Q	Runway 17-35 Strengthening Overlay	\$ 2,052,000	\$ 102,600	\$ 1,949,400	
R	Relocate Fuel Tank	\$ 89,000	\$ 44,500	\$ -	\$ 44,500
S	Service Road	\$ 1,017,000	\$ 50,850	\$ 966,150	
Total		\$ 20,671,000	\$ 959,600	\$ 17,008,900	\$ 2,702,500

* Eligibility for FAA funding does not insure that funds will be available or granted for the project.

- Total costs include construction, temporary flagging and signing, construction staking, testing, engineering, administration, and contingency, as applicable.

Aurora State Airport

1: 2012 Construct ATCT1

Assumptions:

Project includes construction of Air Traffic Control Tower. Estimate includes all site work and construction of the Tower building along with Engineering and Administration.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
ATCT	1	LS	\$3,369,000	\$3,369,000
Total Cost				\$3,369,000
Total Rounded Cost				\$3,369,000

Aurora State Airport

3: 2013 PMP (2013)2

Assumptions:

Project includes crack sealing, AC patching, and surface sealants at various locations on the Airport. Estimate was based on 2009 ODA PMP project cost for Aurora.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Crack Sealing and AC Patching	1	LS	\$10,000	\$10,000
Surface Sealants	25000	SF	\$0.25	\$6,250
Subtotal Construction				\$16,250
Mobilization	10.0%		\$16,250	\$1,625
Total Construction				\$17,875

Engineering & Administration	30%		\$17,875	\$5,363
Contingency	20%		\$17,875	\$3,575
Total Cost				\$26,813
Total Rounded Cost				\$27,000

Aurora State Airport

4: 2014 Helicopter Landing Pads

Assumptions:

Project includes painting of 2 Helicopter Landing Pads near midfield.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Striping	500	SF	\$10.00	\$5,000
Subtotal Other Site Improvements	1	LS	\$500	\$500
Subtotal Construction				\$5,500
Mob., Testing, Temp. Flagging, Surv & Mrkg	20%		\$5,500	\$1,100
Total Construction				\$6,600

Engineering & Administration	40%		\$6,600	\$2,640
Contingency	15%		\$6,600	\$990
Total Cost				\$10,230
Total Rounded Cost				\$11,000

Aurora State Airport

6: 2014 Taxilane Development (Hangar Access)

Assumptions:

Project includes construction of Taxilanes on the east side of the parallel Taxiway near midfield to provide access to new hangar developments. Items included in the construction estimate are drainage improvements, site preparation, excavation, paving, striping, and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving and Excavation	300	SY	\$59.00	\$17,700
Subtotal Other Site Improvements	1	LS	\$9,000	\$9,000
Subtotal Construction				\$26,700
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$26,700	\$4,005
Total Construction				\$30,705

Engineering & Administration	25%		\$30,705	\$7,676
Contingency	15%		\$30,705	\$4,606
Total Cost				\$42,987
Total Rounded Cost				\$43,000

5: 2014 Ramp Reconstruction - State Leased

Assumptions:

Project includes the re-construction of a state leased Apron Ramp on the east side of the parallel Taxiway, in front of the Aurora Aviation FBO. Items included in the construction estimate are drainage improvements, site preparation, excavation, paving, striping. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving and Excavation	8888.889	SY	\$60.00	\$533,333
Subtotal Other Site Improvements	1	LS	\$80,000	\$80,000
Subtotal Construction				\$613,333
Mob., Testing, Temp. Flagging, Surv & N	15.0%		\$613,333	\$92,000
Total Construction				\$705,333
Engineering & Administration	25%		\$705,333	\$176,333
Contingency	15%		\$705,333	\$105,800
Total Cost				\$987,467
Total Rounded Cost				\$988,000

Aurora State Airport

7: 2015 Hangar Development

Assumptions:

Project includes construction of approximately 10 Hangars totaling 44,000 square feet. Estimate includes all site work and construction of the Hangars. Project was estimated to be broken out in 3 phases.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Aircraft Hangars	14667	SF	\$75	\$1,100,000
Site Work	1	LS	\$110,000	\$110,000
Subtotal Construction				\$1,210,000
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$1,210,000	\$181,500
Total Construction				\$1,391,500

Engineering & Administration	30%		\$1,391,500	\$417,450
Contingency	20%		\$1,391,500	\$278,300
Total Cost				\$2,087,250
Total Rounded Cost				\$2,088,000

Aurora State Airport

9: 2016 Environmental Assessment (Runway Improvements)

Assumptions:

Project includes Environmental Assessment for Runway 17-35 Improvements.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Runway Improvement EA	1	LS	\$350,000	\$350,000
Total Cost				\$350,000
Total Rounded Cost				\$350,000

Aurora State Airport

10: 2016 PMP (2016)

Assumptions:

Project includes crack sealing, AC patching, and surface sealants at various locations on the Airport. Estimate was based on 2009 ODA PMP project cost for Aurora.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Crack Sealing and AC Patching	1	LS	\$10,000	\$10,000
Surface Sealants	25000	SF	\$0.25	\$6,250
Subtotal Construction				\$16,250
Mobilization	10.0%		\$16,250	\$1,625
Total Construction				\$17,875

Engineering & Administration	30%		\$17,875	\$5,363
Contingency	20%		\$17,875	\$3,575
Total Cost				\$26,813
Total Rounded Cost				\$27,000

Aurora State Airport

11: 2017 Aurora RFPD Response Facility

Assumptions:

Project includes construction of a RFPD Response Facility of approximately 2,000 square feet. Estimate includes all site work and construction of the Hangars.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Aircraft Hangars	2000	SF	\$150	\$300,000
Site Work	1	LS	\$30,000	\$30,000
Subtotal Construction				\$330,000
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$330,000	\$49,500
Total Construction				\$379,500

Engineering & Administration	30%		\$379,500	\$113,850
Contingency	20%		\$379,500	\$75,900
Total Cost				\$569,250
Total Rounded Cost				\$570,000

Aurora State Airport

13: 2018 Property Acquisition (R17 Displaced Threshold)

Assumptions:

OFA Property Acquisition for Runway 17 Displaced Threshold includes costs of purchasing land and negotiations.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Land Acquisition	2.2	ACRE	\$25,000.00	\$55,000
Property Negotiations	3	EA	\$10,000	\$30,000
Subtotal				\$85,000

Engineering & Administration	5%		\$85,000	\$4,250
Contingency	15%		\$85,000	\$12,750
Total Cost				\$102,000
Total Rounded Cost				\$102,000

Aurora State Airport

14: 2018 Avigation Easement Acquisition (R17 RPZ)

Assumptions:

Avigation Easement for Runway 17 Displaced Threshold includes negotiation costs and per acre costs.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Avigation Easement	2.6	ACRE	\$10,000	\$26,000
Property Negotiations	1	EA	\$10,000	\$10,000
Subtotal				\$36,000

Engineering & Administration	5%		\$36,000	\$1,800
Contingency	15%		\$36,000	\$5,400
Total Cost				\$43,200
Total Rounded Cost				\$44,000

Aurora State Airport

16: 2020 Displaced Threshold (R17 - 800')

Assumptions:

Project includes construction of 800 lineal feet of runway to displace Runway 17 along with 800 lineal feet of parallel Taxiway A east of the runway on the north end. Items included in the construction estimate include drainage improvements, site preparation, excavation, paving, striping, lighting, signage, and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving Section and Excavation	15126	SY	\$59.00	\$892,424
Runway Grooving	8889	SY	\$2.00	\$17,778
Runway Lighting per Length Runway	800	LF	\$56.00	\$44,800
Runway Striping per Length Runway	800	LF	\$6.40	\$5,120
Taxiway Lighting per Length Taxiway	1050	LF	\$112.00	\$117,600
Subtotal Other Site Improvements	1	LS	\$151,712	\$151,712
Subtotal Construction				\$1,229,434
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$1,229,434	\$184,415
Total Construction				\$1,413,849

Engineering & Administration	25%		\$1,413,849	\$353,462
Contingency	15%		\$1,413,849	\$212,077
Total Cost				\$1,979,389
Total Rounded Cost				\$1,980,000

Aurora State Airport

17: 2020 Install Runway 17-35 PAPIs

Assumptions:

Project includes installation of a new PAPI navaid systems for Runway 17-35.
Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Runway 17 PAPI	1	LS	\$40,000	\$40,000
Runway 35 PAPI	1	LS	\$40,000	\$40,000
Subtotal Construction				\$80,000
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$80,000	\$12,000
Total Construction				\$92,000

Engineering & Administration	25%		\$92,000	\$23,000
Contingency	15%		\$92,000	\$13,800
Total Cost				\$128,800
Total Rounded Cost				\$129,000

Aurora State Airport

18: 2020 R17 Run-Up Area

Assumptions:

Project includes construction of a Runup Apron on the east side of the parallel Taxiway for Runway 17. Items included in the construction estimate are drainage improvements, site preparation, excavation, paving, striping, taxiway lighting and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving and Excavation	2585	SY	\$59.00	\$152,541
Subtotal Other Site Improvements	1	LS	\$23,000	\$23,000
Taxiway Lighting per Length Runway	400	LF	\$112.00	\$44,800
Subtotal Construction				\$220,341
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$220,341	\$33,051
Total Construction				\$253,392

Engineering & Administration	25%		\$253,392	\$63,348
Contingency	15%		\$253,392	\$38,009
Total Cost				\$354,749
Total Rounded Cost				\$355,000

Aurora State Airport

19: 2018 Property Acquisition (R35 RPZ)

Assumptions:

Property Acquisition within the RPZ of the extended Runway 35. Costs include cost per acre of purchasing real property and negotiations required.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Property with Residence (14018 NE Keil Rd)	1	EA	\$240,000.00	\$240,000.00
Property with Residence (21860 NE Boones Ferry Rd)	1	EA	\$275,000.00	\$275,000.00
Property with Residence (21830 NE Boones Ferry RD)	1	EA	\$130,000.00	\$130,000.00
Property with Residence (21810 NE Boones Ferry RD)	1	EA	\$150,000.00	\$150,000.00
Relocation Assistance	4	EA	\$50,000.00	\$200,000.00
Land Acquisition	44.46	ACRE	\$25,000.00	\$1,111,500
Property Negotiations	12	EA	\$10,000	\$120,000
Subtotal				\$2,226,500

Engineering & Administration	5%		\$2,226,500	\$111,325
Contingency	10%		\$2,226,500	\$222,650
Total Cost				\$2,560,475
Total Rounded Cost				\$2,561,000

Aurora State Airport

20: 2019 Keil Road Relocation

Assumptions:

Project includes relocating Keil Road where it enters the extended Runway 35 OFA and RPZ. Items included in the construction estimate are Right of Way (ROW) acquisition, drainage improvements, site preparation, excavation, paving, striping, and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving and Excavation	11333	SY	\$55	\$623,333
ROW Acquisition	3.9	ACRE	\$20,000	\$78,000
ROW Negotiations	6	EA	\$10,000	\$60,000
Subtotal Other Site Improvements	1	LS	\$125,000	\$125,000
Subtotal Construction				\$886,333
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$886,333	\$132,950
Total Construction				\$1,019,283

Engineering & Administration	25%		\$1,019,283	\$254,821
Contingency	15%		\$1,019,283	\$152,893
Total Cost				\$1,426,997
Total Rounded Cost				\$1,427,000

Aurora State Airport

21: 2020 Runway Extension (R35 - 1000')

Assumptions:

Project includes construction of 1000 lineal feet of runway to extend Runway 35 along with 1000 lineal feet of parallel Taxiway east of the runway on the south end. Items included in the construction estimate include drainage improvements, site preparation, excavation, paving, striping, lighting, signage, navaid improvements, and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving Section and Excavation	18148	SY	\$59.00	\$1,070,706
Runway Grooving	11111	SY	\$2.00	\$22,222
Runway Lighting per Length Runway	6000	LF	\$56.00	\$336,000
Runway Striping per Length Runway	6000	LF	\$6.40	\$38,400
Taxiway Lighting per Length Runway	1300	LF	\$112.00	\$145,600
Subtotal Other Site Improvements	1	LS	\$182,000	\$182,000
Runway 35 PAPI	1	LS	\$40,000	\$40,000
Runway 35 Relocate Localizer	1	LS	\$50,000	\$50,000
Subtotal Construction				\$1,884,928
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$1,884,928	\$282,739
Total Construction				\$2,167,668

Engineering & Administration	25%		\$2,167,668	\$541,917
Contingency	15%		\$2,167,668	\$325,150
Total Cost				\$3,034,735
Total Rounded Cost				\$3,035,000

Aurora State Airport

22: 2020 Install Runway 17 PAPIs

Assumptions:

Project includes installation of a new PAPI navaid system for Runway 17. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Runway 17 PAPI	1	LS	\$40,000	\$40,000
Subtotal Construction				\$40,000
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$40,000	\$6,000
Total Construction				\$46,000

Engineering & Administration	25%		\$46,000	\$11,500
Contingency	15%		\$46,000	\$6,900
Total Cost				\$64,400
Total Rounded Cost				\$65,000

Aurora State Airport

23: 2019 PMP (2019)

Assumptions:

Project includes crack sealing, AC patching, and surface sealants at various locations on the Airport. Estimate was based on 2009 ODA PMP project cost for Aurora.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Crack Sealing and AC Patching	1	LS	\$10,000	\$10,000
Surface Sealants	25000	SF	\$0.25	\$6,250
Subtotal Construction				\$16,250
Mobilization	10.0%		\$16,250	\$1,625
Total Construction				\$17,875

Engineering & Administration	30%		\$17,875	\$5,363
Contingency	20%		\$17,875	\$3,575
Total Cost				\$26,813
Total Rounded Cost				\$27,000

Aurora State Airport

24: 2019 Taxilane Development (Hangar Access)

Assumptions:

Project includes construction of Taxilanes on the east side of the parallel Taxiway near midfield to provide access to new hangar developments. Items included in the construction estimate are drainage improvements, site preparation, excavation, paving, striping, and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving and Excavation	300	SY	\$59.00	\$17,700
Subtotal Other Site Improvements	1	LS	\$9,000	\$9,000
Subtotal Construction				\$26,700
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$26,700	\$4,005
Total Construction				\$30,705

Engineering & Administration	25%		\$30,705	\$7,676
Contigency	15%		\$30,705	\$4,606
Total Cost				\$42,987
Total Rounded Cost				\$43,000

Aurora State Airport

25: 2020 R17/35 Strengthening Overlay

Assumptions:

Project includes a strength overlay of Runway 16-34 which will include a 1/2" Grind and 3" Overlay along with 2.5" transitions to Connector taxiways. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1 along with Bid results from Grants Pass Runway Rehab project.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Asphalt 1/2" Grinding	69067	SY	\$2.00	\$138,133
Subtotal Paving	69067	SY	\$14.00	\$966,933
Runway Grooving	66667	SY	\$2.00	\$133,333
Runway Striping per Length Runway	6000	LF	\$6.40	\$38,400
Subtotal Other Site Improvements	1	LS	\$2,763	\$2,763
Subtotal Construction				\$1,279,563
Mob., Testing, Temp. Flagging, Surv & Mrkg	14.5%		\$1,279,563	\$185,537
Total Construction				\$1,465,099

Engineering & Administration	25%		\$1,465,099	\$366,275
Contingency	15%		\$1,465,099	\$219,765
Total Cost				\$2,051,139
Total Rounded Cost				\$2,052,000

Aurora State Airport

27: 2021 Master Plan Update

Assumptions:

Project includes Master Plan update for Aurora State Airport

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Runway Improvement EA	1	LS	\$200,000	\$200,000
Total Cost				\$200,000
Total Rounded Cost				\$200,000

Aurora State Airport

26: 2021 Hangar Development

Assumptions:

Project includes construction of approximately 10 Hangars totaling 44,000 square feet. Estimate includes all site work and construction of the Hangars. Project was estimated to be broken out in 3 phases.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Aircraft Hangars	14667	SF	\$75	\$1,100,000
Site Work	1	LS	\$110,000	\$110,000
Subtotal Construction				\$1,210,000
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$1,210,000	\$181,500
Total Construction				\$1,391,500

Engineering & Administration	30%		\$1,391,500	\$417,450
Contingency	20%		\$1,391,500	\$278,300
Total Cost				\$2,087,250
Total Rounded Cost				\$2,088,000

Aurora State Airport

28: PMP (2022, 2025, 2028, 2031)

Assumptions:

Project includes crack sealing, AC patching, and surface sealants at various locations on the Airport. Estimate was based on 2009 ODA PMP project cost for Aurora multiplied by 4 for each 2022, 2025, 2028, and 2031.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Crack Sealing and AC Patching	1	LS	\$10,000	\$10,000
Surface Sealants	25000	SF	\$0.25	\$6,250
Subtotal Construction				\$16,250
Mobilization	10.0%		\$16,250	\$1,625
Total Construction				\$17,875

Engineering & Administration	30%		\$17,875	\$5,363
Contingency	20%		\$17,875	\$3,575
Subtotal Cost Per year				\$26,813
Total Rounded Cost				\$108,000

Aurora State Airport

2: 2012 Service Road

Assumptions:

Project includes construction a service road through the airport. Estimate includes easement acquisition, drainage improvements, site preparation, excavation, paving, striping, and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving and Excavation	8400	SY	\$55	\$461,982
Easement Acquisitions	4	EA	\$20,000	\$80,000
Subtotal Other Site Improvements	1	LS	\$92,000	\$92,000
Subtotal Construction				\$633,982
Mob., Testing, Temp. Flagging, Surv & Mrkg	14.5%		\$633,982	\$91,927
Total Construction				\$725,909

Engineering & Administration	25%		\$725,909	\$181,477
Contingency	15%		\$725,909	\$108,886
Total Cost				\$1,016,273
Total Rounded Cost				\$1,017,000

Aurora State Airport

29: Apron Development

Assumptions:

Project includes construction of Aircraft Parking Aprons on the east side of the parallel Taxiway near midfield. Items included in the construction estimate are drainage improvements, site preparation, excavation, paving, striping, and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving and Excavation	15676	SY	\$59.00	\$924,875
Subtotal Other Site Improvements	1	LS	\$92,000	\$92,000
Subtotal Construction				\$1,016,875
Mob., Testing, Temp. Flagging, Surv & Mrkg	15%		\$1,016,875	\$152,531
Total Construction				\$1,169,407

Engineering & Administration	25%		\$1,169,407	\$292,352
Contigency	15%		\$1,169,407	\$175,411
Total Cost				\$1,637,170
Total Rounded Cost				\$1,638,000

Aurora State Airport

30: Taxilane Development (Hangar Access)

Assumptions:

Project includes construction of Taxilanes on the east side of the parallel Taxiway near midfield to provide access to new hangar developments. Items included in the construction estimate are drainage improvements, site preparation, excavation, paving, striping, and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving and Excavation	300	SY	\$59.00	\$17,700
Subtotal Other Site Improvements	1	LS	\$9,000	\$9,000
Subtotal Construction				\$26,700
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$26,700	\$4,005
Total Construction				\$30,705

Engineering & Administration	25%		\$30,705	\$7,676
Contingency	15%		\$30,705	\$4,606
Total Cost				\$42,987
Total Rounded Cost				\$43,000

Aurora State Airport

31: Hangar Development

Assumptions:

Project includes construction of approximately 10 Hangars totaling 44,000 square feet. Estimate includes all site work and construction of the Hangars. Project was estimated to be broken out in 3 phases.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Aircraft Hangars	14667	SF	\$75	\$1,100,000
Site Work	1	LS	\$110,000	\$110,000
Subtotal Construction				\$1,210,000
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$1,210,000	\$181,500
Total Construction				\$1,391,500

Engineering & Administration	30%		\$1,391,500	\$417,450
Contingency	20%		\$1,391,500	\$278,300
Total Cost				\$2,087,250
Total Rounded Cost				\$2,088,000

Aurora State Airport

32: Cargo Apron

Assumptions:

Project includes construction of a Cargo Apron on the east side of the parallel Taxiway near midfield. Items included in the construction estimate are drainage improvements, site preparation, excavation, paving, striping, and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving and Excavation	1889	SY	\$59.00	\$111,444
Subtotal Other Site Improvements	1	LS	\$11,000	\$11,000
Subtotal Construction				\$122,444
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$122,444	\$18,367
Total Construction				\$140,811

Engineering & Administration	25%		\$140,811	\$35,203
Contingency	15%		\$140,811	\$21,122
Total Cost				\$197,136
Total Rounded Cost				\$198,000

Aurora State Airport

33: Relocate Fuel Tanks

Assumptions:

Project includes relocating fuel storage. Estimate includes new pavement approximately 50'x75' and relocating the tanks.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving new Fuel Storage pad	416.7	SY	\$55.00	\$22,917
Relocate Fuel Storage Tank	1	LS	\$30,000.00	\$30,000
Subtotal Other Site Improvements	1	LS	\$2,292	\$2,292
Subtotal Construction				\$55,208
Mob., Testing, Temp. Flagging, Surv & Mrkg	14.5%		\$55,208	\$8,005
Total Construction				\$63,214

Engineering & Administration	25%		\$63,214	\$15,803
Contingency	15%		\$63,214	\$9,482
Total Cost				\$88,499
Total Rounded Cost				\$89,000

Aurora State Airport

34: R17 Run-Up Area4

Assumptions:

Project includes construction of a Runup Apron on the east side of the parallel Taxiway for Runway 17. Items included in the construction estimate are drainage improvements, site preparation, excavation, paving, striping, taxiway lighting and seeding. Construction unit prices and soft cost percentages were estimated starting from ODA 2009 Unit Cost Estimate for Region 1.

Cost Estimate:

Item Description	Qty	Unit	Price/Unit	Cost
Subtotal Paving and Excavation	2585	SY	\$59.00	\$152,541
Subtotal Other Site Improvements	1	LS	\$23,000	\$23,000
Taxiway Lighting per Length Runway	400	LF	\$112.00	\$44,800
Subtotal Construction				\$220,341
Mob., Testing, Temp. Flagging, Surv & Mrkg	15.0%		\$220,341	\$33,051
Total Construction				\$253,392

Engineering & Administration	25%		\$253,392	\$63,348
Contingency	15%		\$253,392	\$38,009
Total Cost				\$354,749
Total Rounded Cost				\$355,000