

St. Louis Lambert International Airport
Planning/Land/Noise Projects
FFY 2019

Project Description	Project Cost	Local Match 25%	Requested Amount	FAA Anticipated Approved Amt
FY 2019				
Master Plan w/eALP Update FY 2019	\$ 4,200,000	\$ (1,050,000)	\$ 3,150,000	\$ 3,150,000
TOTAL	\$ 4,200,000	\$ (1,050,000)	\$ 3,150,000	\$ 3,150,000
GRAND TOTALS	\$ 4,200,000	\$ (1,050,000)	\$ 3,150,000	\$ 3,150,000

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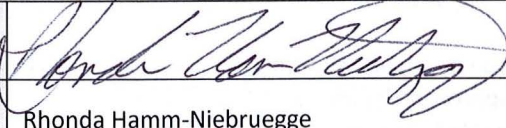
SEE INSTRUCTIONS TO COMPLETE THIS INFORMATION

Airport Name, LOCID, City, State:	St. Louis Lambert International Airport, KSTL, St. Louis, Missouri		
AIP Project Type:	Airport Planning Project		
Local Priority:	2 - High	Federal Share:	\$ 3,150,000
FFY Requested:	FY-2019	State Share:	\$0
Provide Detailed Project Scope and Justification Below. You must attach a sketch/drawing that clearly identifies the scope of the project.		Local Share:	\$1,050,000
		Total Project Cost:	\$ 4,200,000

The Airport Master Plan and Airport Layout Plan for St. Louis Lambert International Airport date to 2013. FAA guidance recommends periodic updates to ensure the airport sponsor's strategy for developing airport facilities is timely, accurate and to current standards. The project proposes preparation of a full Master Plan pursuant to AC150/5070-6B. Emphasis would be given to landside and ground access issues, plus assessing the condition of utilities and storm water management. The airport sponsor has electronic geospatial data for the runway/taxiway system. The data would be converted to the standard suitable for insertion in the FAA Airport Geographic Information System (AGIS). Where necessary geodetic field surveys would be performed to confirm data accuracy or enhance a digital data set. Airline service is being up-gauged to larger aircraft and the project proposes AEDT noise contours to assess impact on surrounding communities.



SPONSOR SIGNATURE BLOCK

Signature:		Date:	2/15/2018
Printed Name:	Rhonda Hamm-Niebruegge	Title:	Director of Airports
Phone Number:	314-426-8020	Email:	RKHamm-Niebruegge@flystl.com

St. Louis Lambert International Airport
Equipment
FFY 2018-2021

Project Description	Project Cost	Local Match	Requested Amount	FAA Anticipated Approved Amt	Notes
FY 2018					
Aircraft Rescue Fire Fighting Equipment #49	\$ 300,000	\$ (150,000)	\$ 150,000	\$ 150,000	
VALE - Pre-Conditioned Air (PCA) (4)	\$ 540,000	\$ (135,000)	\$ 405,000	\$ 405,000	A16,A18,A19,,A21
VALE - Ground Power Unit (GPU)(5)	\$ 400,000	\$ (100,000)	\$ 300,000	\$ 300,000	A10,A16,A18,A19,A21
VALE - Gate Electrification	\$ 1,050,000	\$ (262,500)	\$ 787,500	\$ 787,500	A16,A18,A19,A21
VALE - Gate Design	\$ 150,000	\$ (37,500)	\$ 112,500	\$ 112,500	VALE
VALE Project Formulation	\$ 55,000	\$ (13,750)	\$ 41,250	\$ 41,250	VALE
TOTAL	\$ 2,495,000	\$ (647,500)	\$ 1,796,250	\$ 1,796,250	
FY 2019					
Aircraft Rescue Fire Fighting Equipment #45	\$ 1,192,928	\$ (298,232)	\$ 894,696	\$ 894,696	
VALE - Pre-Conditioned Air (PCA) (4)	\$ 540,000	\$ (135,000)	\$ 405,000	\$ 405,000	A16, A18, A19, A21
VALE-Ground Power Units (GPU) (4)	\$ 400,000	\$ (100,000)	\$ 300,000	\$ 300,000	A16, A18, A19, A21
VALE - Gate Electrification	\$ 1,050,000	\$ (262,500)	\$ 787,500	\$ 787,500	A16, A18, A19, A21
VALE - Project Design	\$ 150,000	\$ (37,500)	\$ 112,500	\$ 112,500	A16, A18, A19, A21
VALE - Project Formulation	\$ 55,000	\$ (13,750)	\$ 41,250	\$ 41,250	A16, A18, A19, A21
VALE- Pre-Conditioned Air (PCA) (3)	\$ 405,000	\$ (101,250)	\$ 303,750	\$ 303,750	C15, C19, C23
VALE - Ground Power Unit (GPU) (3)	\$ 240,000	\$ (60,000)	\$ 180,000	\$ 180,000	C15, C19, C23
VALE - Gate Electrification	\$ 1,200,000	\$ (300,000)	\$ 900,000	\$ 900,000	C15, C19, C23
VALE - Project Design	\$ 150,000	\$ (37,500)	\$ 112,500	\$ 112,500	C15, C19, C23
VALE - Project Formulation	\$ 75,000	\$ (18,750)	\$ 56,250	\$ 56,250	C15, C19, C23
TOTAL	\$ 5,457,928	\$ (1,364,482)	\$ 4,093,446	\$ 4,093,446	
FY 2020					
Aircraft Rescue Fire Fighting Equipment #42	\$ 300,000	\$ (75,000)	\$ 225,000	225,000	
East Terminal Boiler	\$ 2,768,952	\$ (692,238)	\$ 2,076,714	2,076,714	
VALE -Project Formulation	\$ 75,000	\$ (18,750)	\$ 56,250	56,250	for boiler
VALE - Boiler Design	\$ 150,000	\$ (37,500)	\$ 112,500	112,500	
VALE -Power Vacuum Sweeper	\$ 125,000	\$ (31,250)	\$ 93,750	93,750	incremental difference between diesel and cng
VALE -Project Formulation	\$ 50,000	\$ (12,500)	\$ 37,500	37,500	
TOTAL	\$ 3,468,952	\$ (867,238)	\$ 2,601,714	\$2,601,714	
FY 2021					
VALE - Pre-Conditioned Air (PCA) (3)	\$ 405,000	\$ (101,250)	\$ 303,750	\$ 303,750	C27, C29, C30
VALE - Ground Power Unit (GPU) (3)	\$ 240,000	\$ (60,000)	\$ 180,000	\$ 180,000	C27, C29, C30
VALE - Gate Electrification	\$ 1,200,000	\$ (300,000)	\$ 900,000	\$ 900,000	C27, C29, C30
VALE - Project Design	\$ 150,000	\$ (37,500)	\$ 112,500	\$ 112,500	C27, C29, C30
TOTAL	\$ 1,995,000	\$ (498,750)	\$ 1,496,250	\$ 1,496,250	
GRAND TOTALS	\$ 13,416,880	\$ (3,377,970)	\$ 9,987,660	\$ 9,987,660	

FEDERAL AVIATION ADMINISTRATION

CIP DATA SHEET

CAPITAL IMPROVEMENT PROGRAM (CIP)

AIRPORTS DIVISION - CENTRAL REGION

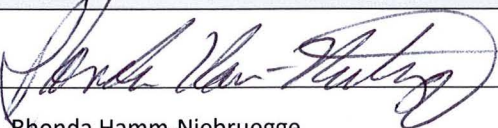
SEE INSTRUCTIONS TO COMPLETE THIS INFORMATION

Airport Name, LOCID, City, State:	St. Louis Lambert International Airport, STL, Bridgeton, MO		
AIP Project Type:	VALE – Gate Electrification		
Local Priority:	2 - High	Federal Share:	\$1,646,250
FFY Requested:	FY-2018	State Share:	\$ 0
Provide Detailed Project Scope and Justification Below. You must attach a sketch/drawing that clearly identifies the scope of the project.		Local Share:	\$548,750
		Total Project Cost:	\$2,195,000

St. Louis Lambert International Airport (STL) is located with St. Louis County in the state of Missouri which has been designated by the EPA as marginal nonattainment for ozone. STL is applying for funds through the FAA's Voluntary Airport Low Emission (VALE) Program to eliminate mobile sources which are contributing to the St. Louis County's non-attainment designation. Delta and United Airlines have leases to operate DG III aircraft at Gates A10, A16, A18, A19, and A21. Gates A16, A18, A19, and A21 have 30 ton PCAs and diesel GPUs. Gate A10, leased by Delta, has a diesel GPU which was not replaced in the VALE gate electrification program in FY 17. The PCAs at Gates A16, A18, A19 and A21 are undersized for DG III aircraft. As a result of the undersized equipment, United is using APUs at its four gates. Both airlines are using diesel GPUs at their gates. The APUs and GPUs contribute NOx and VOC, the precursors for ozone, to the St. Louis County air quality. The Airport will upgrade the electrical infrastructure and add 45 ton PCAs and 90 KVA electric GPUs for the more demanding DG III aircraft. This will eliminate APU and GPU mobile sources at these gates.



SPONSOR SIGNATURE BLOCK

Signature:		Date:	2/15/2018
Printed Name:	Rhonda Hamm-Niebruegge	Title:	Director of Airports
Phone Number:	314-426-8020	Email:	Rkhamm-niebruegge@flystl.com

**FY 2018 Vale Grant
Lambert-St. Louis International Airport**

February 15, 2018

Project	PCAs	GPUs	Electrical upgrades needed	Total Cost	AIP funding	Airport Match
Stationary Grant						
Gate Electrification						
Gate A10		80,000		80,000	60,000	20,000
Gate A16	135,000	80,000	100,000	315,000	236,250	78,750
Gate A18	135,000	80,000	100,000	315,000	236,250	78,750
Gate A19	135,000	80,000	100,000	315,000	236,250	78,750
Gate A21	135,000	80,000	100,000	315,000	236,250	78,750
Gate Project Design				150,000	112,500	37,500
A Concourse Infrastructure			650,000	650,000	487,500	162,500
Project Formulation				55,000	41,250	13,750
Subtotal	540,000	320,000	1,050,000	2,195,000	1,646,250	548,750
Total Cost				2,195,000	1,646,250	548,750

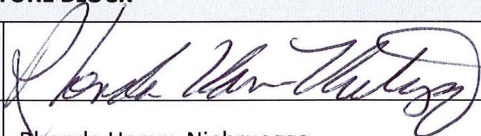
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CIP DATA SHEET

CAPITAL IMPROVEMENT PROGRAM (CIP)

AIRPORTS DIVISION - CENTRAL REGION

SEE INSTRUCTIONS TO COMPLETE THIS INFORMATION			
Airport Name, LOCID, City, State:	St. Louis Lambert International Airport, STL, Bridgeton, MO		
AIP Project Type:	VALE – Gate Electrification		
Local Priority:	2 - High	Federal Share:	\$1,646,250
FFY Requested:	FY-2019	State Share:	\$ 0
Provide Detailed Project Scope and Justification Below. You must attach a sketch/drawing that clearly identifies the scope of the project.		Local Share:	\$548,750
		Total Project Cost:	\$2,195,000
<p>St. Louis Lambert International Airport (STL) is located with St. Louis County in the state of Missouri which has been designated by the EPA as marginal nonattainment for ozone. STL is applying for funds through the FAA's Voluntary Airport Low Emission (VALE) Program to eliminate mobile sources which are contributing to the St. Louis County's non-attainment designation. Delta and United Airlines have leases to operate DG III aircraft at Gates A10, A16, A18, A19, and A21. Gates A16, A18, A19, and A21 have 30 ton PCAs and diesel GPUs. Gate A10, leased by Delta, has a diesel GPU which was not replaced in the VALE gate electrification program in FY 17. The PCAs at Gates A16, A18, A19 and A21 are undersized for DG III aircraft. As a result of the undersized equipment, United is using APUs at its four gates. Both airlines are using diesel GPUs at their gates. The APUs and GPUs contribute NOx and VOC, the precursors for ozone, to the St. Louis County air quality. The Airport will upgrade the electrical infrastructure and add 45 ton PCAs and 90 KVA electric GPUs for the more demanding DG III aircraft. This will eliminate APU and GPU mobile sources at these gates.</p>			
			
SPONSOR SIGNATURE BLOCK			
Signature:		Date:	2/15/2018
Printed Name:	Rhonda Hamm-Niebruegge	Title:	Director of Airports
Phone Number:	314-426-8020	Email:	Rkhamm-niebruegge@flystl.com

FY 2019 Vale Grant
Lambert-St. Louis International Airport

February 15, 2018

Project	PCAs	GPUs	Electrical upgrades needed	Total Cost	AIP funding	Airport Match
Stationary Grant						
Gate Electrification						
Gate A10		80,000		80,000	60,000	20,000
Gate A16	135,000	80,000	100,000	315,000	236,250	78,750
Gate A18	135,000	80,000	100,000	315,000	236,250	78,750
Gate A19	135,000	80,000	100,000	315,000	236,250	78,750
Gate A21	135,000	80,000	100,000	315,000	236,250	78,750
Gate Project Design				150,000	112,500	37,500
A Concourse Infrastruture			650,000	650,000	487,500	162,500
Project Formulation				55,000	41,250	13,750
Subtotal	540,000	320,000	1,050,000	2,195,000	1,646,250	548,750
Total Cost				2,195,000	1,646,250	548,750


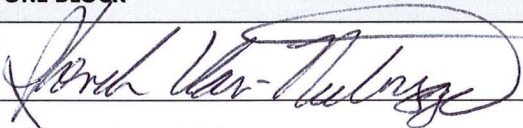
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CAPITAL IMPROVEMENT PROGRAM (CIP)

AIRPORTS DIVISION - CENTRAL REGION

SEE INSTRUCTIONS TO COMPLETE THIS INFORMATION			
Airport Name, LOCID, City, State:	St. Louis Lambert International Airport, STL, Bridgeton, MO		
AIP Project Type:	VALE – Gate Electrification		
Local Priority:	2 - High	Federal Share:	\$ 1,552,500
FFY Requested:	FY-2019	State Share:	\$ 0
Provide Detailed Project Scope and Justification Below. You must attach a sketch/drawing that clearly identifies the scope of the project.		Local Share:	\$517,500
		Total Project Cost:	\$ 2,070,000
<p>St. Louis Lambert International Airport (STL) is located with St. Louis County in the state of Missouri which has been designated by the EPA as marginal nonattainment for ozone. STL is applying for funds through the FAA's Voluntary Airport Low Emission (VALE) Program to eliminate mobile sources which are contributing to the St. Louis County's non-attainment designation. Alaska Airlines and Frontier Airlines have preferential leases to operate DG III aircraft at Gates C15, C19, and C23. Gate C15 has a 30 ton PCA and a diesel GPU. Gates C19 and C23 have 30 ton PCAs and 400HZ GPUs. The PCAs at these gates are undersized for Alaska and Frontier's fleet of DG III aircraft. The GPUs at Gates C19 and C23 are past useful life. As a result of the undersized equipment, Alaska and Frontier aircraft are using APUs at the gates and at C15 a diesel GPUs. The APUs and GPU contribute NOx and VOC, the precursors for ozone, to the St. Louis County air quality. The Airport will upgrade the electrical infrastructure and add 45 ton PCAs and 90 KVA electric GPUs for the more demanding DG III aircraft. This will eliminate APU and GPU mobile sources at these gates.</p>			
			
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Signature:		Date:	2/15/2018
Printed Name:	Rhonda Hamm-Niebruegge	Title:	Director of Airports
Phone Number:	314-426-8020	Email:	Rkhamm-niebruegge@flystl.com

**FY 2019 Vale Grant
Lambert-St. Louis International Airport**

February 15, 2018

Project	PCAs	GPUs	Electrical upgrades needed	Total Cost	AIP funding	Airport Match
Stationary Grant						
Gate Electrification						
Gate C15	135,000	80,000	100,000	315,000	236,250	78,750
Gate C19	135,000	80,000	100,000	315,000	236,250	78,750
Gate C23	135,000	80,000	100,000	315,000	236,250	78,750
Gate Project Design				150,000	112,500	37,500
C Concourse Infrastruture			900,000	900,000	675,000	225,000
Project Formulation				75,000	56,250	18,750
Subtotal	405,000	240,000	1,200,000	2,070,000	1,552,500	517,500
Total Cost				2,070,000	1,552,500	517,500


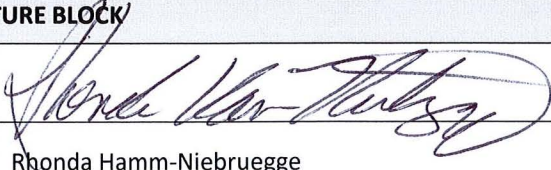
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FEDERAL AVIATION ADMINISTRATION

CIP DATA SHEET

CAPITAL IMPROVEMENT PROGRAM (CIP)

AIRPORTS DIVISION - CENTRAL REGION

SEE INSTRUCTIONS TO COMPLETE THIS INFORMATION			
Airport Name, LOCID, City, State:	St. Louis Lambert International Airport, STL, Bridgeton, MO		
AIP Project Type:	VALE		
Local Priority:	1 - Very High	Federal Share:	\$ 2,076,712
FFY Requested:	FY-2020	State Share:	\$0
Provide Detailed Project Scope and Justification Below. You must attach a sketch/drawing that clearly identifies the scope of the project.		Local Share:	\$692,237
		Total Project Cost:	\$ 2,768,949
<p>St. Louis Lambert International Airport (STL) is applying for funds through the FAA's Voluntary Airport Low Emission (VALE) Program to eliminate stationary sources which are contributing to the St. Louis County's non-attainment designation. The Airport has three boilers at the East Power Plant supplying steam to heat for Terminal 2, the D Concourse, and the C Concourse. The original boilers were installed in 1985 and are past their useful life and are fueled with natural gas and diesel. Two of the boilers will deliver 40,000 pounds per hour of super- heated steam and one boiler will deliver 20,000 pounds of super-heated steam per hour with an efficiency rating of 80%. With the age of the current boilers at 30+ years and the available new technology for energy saving including heat transfers, burner modulation, and smart electronics to control the boiler process, installing one new boiler STL would significantly reduce fuel consumption and a stationary source that contributes to the non-attainment status for St. Louis County.</p>			
			
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Printed Name:	Rhonda Hamm-Niebruegge	Title:	Director of Airports
Phone Number:	314-426-8020	Email:	Rkhamm-niebruegge@flystl.com

FY 2020 VALE Grant
St. Louis Lambert International Airport

Line Item Description	Escalated Cost (USD for 2020 Install)	AIP Funding	Local Match	Total Cost
Site Mobilization	25,667	19,250	6,416	25,666
General Requirements	55,548	41,661	13,887	55,548
Selective Demolition	132,833	99,624	33,208	132,832
Mechanical Piping / Boiler Stacks	289,818	217,363	72,454	289,817
Direct Digital Controls	202,873	152,155	50,718	202,873
Steam Boilers (1@40K pph)	1,449,092	1,086,819	362,273	1,449,092
Surge Tanks (1)	241,515	181,136	60,379	241,515
Blowdown Tanks	48,303	36,227	12,076	48,303
General Electrical Requirements	48,303	36,227	12,076	48,303
Project Design	200,000	150,000	50,000	200,000
Project Formulation	75,000	56,250	18,750	75,000
Total	\$2,768,952	\$2,076,712	\$692,237	\$2,768,949

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FEDERAL AVIATION ADMINISTRATION

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CAPITAL IMPROVEMENT PROGRAM (CIP)

AIRPORTS DIVISION - CENTRAL REGION

SEE INSTRUCTIONS TO COMPLETE THIS INFORMATION			
Airport Name, LOCID, City, State:	St. Louis Lambert International Airport, STL Bridgeton, MO		
AIP Project Type:	VALE – CNG Power vacuum sweeper to remove foreign object debris		
Local Priority:	2 - High	Federal Share:	\$ 131,250
FFY Requested:	FY-2020	State Share:	\$0
Provide Detailed Project Scope and Justification Below. You must attach a sketch/drawing that clearly identifies the scope of the project.		Local Share:	\$43,750
		Total Project Cost:	\$ 175,000
<p>St. Louis County has been designated by the EPA as moderate nonattainment for PM 2.5 and marginal nonattainment for ozone. St. Louis Lambert International Airport is applying for funds to purchase and replace vehicles with cleaner burning fuel alternatives. Compressed natural gas (CNG) meets the VALE program low emission goals in that it is a clean burning fuel. CNG fuel systems are completely sealed and CNG vehicles produce no evaporative emissions. Because natural gas is a low-carbon, clean-burning fuel, a switch to natural gas in these applications can result in substantial reductions of hydrocarbon, carbon monoxide, PM 2.5, oxides of nitrogen, and greenhouse gas emissions. The existing power vacuum sweeper was purchased in 2005. The vehicle is diesel, requires high maintenance, and the parts for the vehicle are becoming harder to find. The Airport will be purchasing a new CNG power vacuum sweeper for foreign object debris (FOD) to replace the existing diesel power vacuum sweeper. The Airport will be seeking the incremental difference in cost between a diesel and a CNG fuel powered engine.</p> 			
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Signature:		Date:	2/15/2018
Printed Name:	Rhonda Hamm-Niebruegge	Title:	Director of Airports
Phone Number:	314-426-8020	Email:	Rkhamm-niebruegge@flystl.com

**FY 2020 Vale Grant
St. Louis International Airport**

February 15, 2018

Project	Cost new diesel	Cost new CNG	Incremental difference	Total Cost	AIP funding	Airport Match
Power Sweeper+	350,000	475,000	125,000	125,000	93,750	31,250
Project Formulation				50,000	37,500	12,500
Subtotal				175,000	131,250	43,750
Total Cost				175,000	131,250	43,750

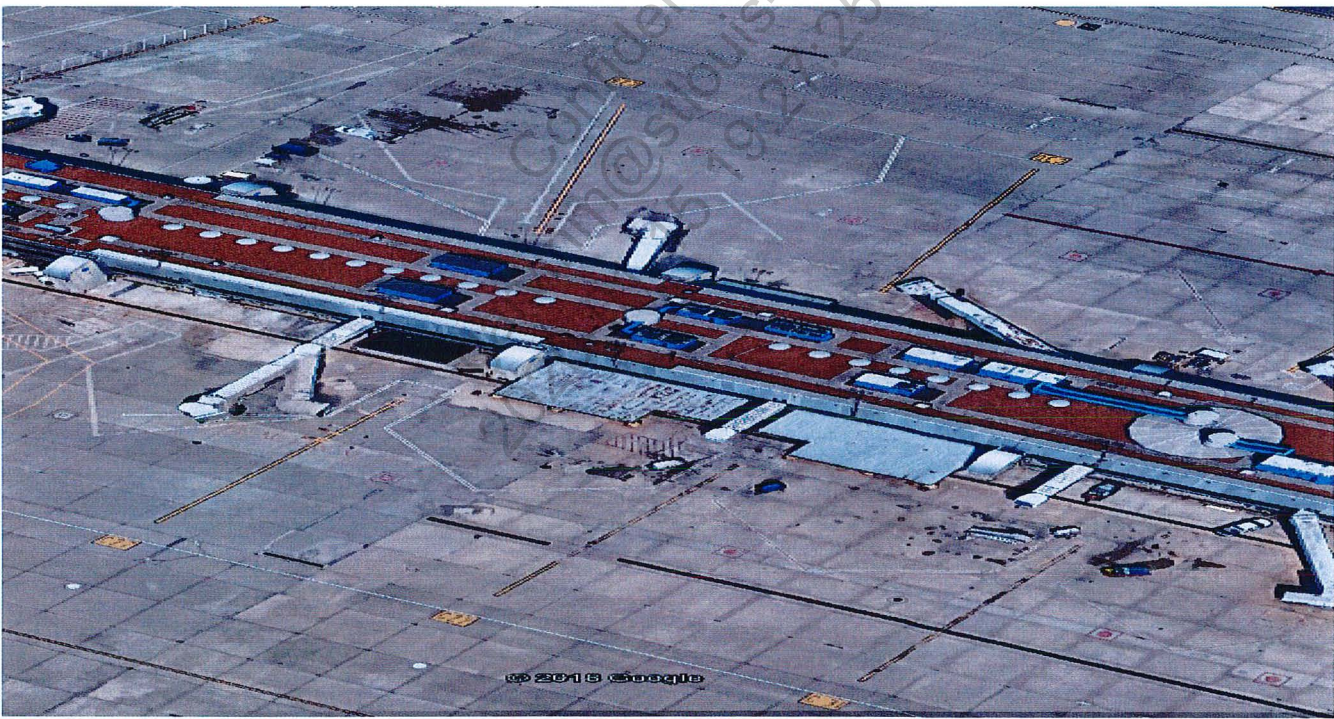
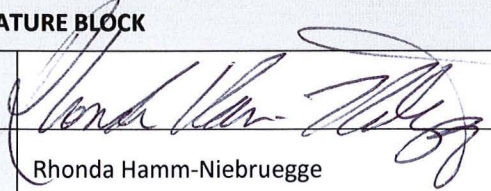
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CAPITAL IMPROVEMENT PROGRAM (CIP)

AIRPORTS DIVISION - CENTRAL REGION

SEE INSTRUCTIONS TO COMPLETE THIS INFORMATION			
Airport Name, LOCID, City, State:	St. Louis Lambert International Airport, STL, Bridgeton, MO		
AIP Project Type:	VALE- Gate Electrification		
Local Priority:	2 - High	Federal Share:	\$1,552,500
FFY Requested:	FY-2021	State Share:	\$0
Provide Detailed Project Scope and Justification Below. You must attach a sketch/drawing that clearly identifies the scope of the project.		Local Share:	\$517,500
		Total Project Cost:	\$ 2,070,000
<p>St. Louis Lambert International Airport (STL) is applying for funds through the FAA's Voluntary Airport Low Emission (VALE) Program to eliminate mobile sources which are contributing to the St. Louis County's non-attainment designation. Frontier, Alaska and American operate DG III aircraft at Gate C27. The existing 30 ton PCA is undersized for DG III aircraft and the GPU is past useful life. As a result of the undersized equipment, the aircraft are using APUs while at the gate. The jet bridges at Gates C29 and C30 were removed because of age and condition. PFC 11 will fund two new passenger boarding bridges at these gates. C27, C29, and C30 are the last three gates at the Airport to be electrified. The Airport will upgrade the electrical infrastructure and add 45 ton PCAs and 90 KVA electric GPUs for the more demanding DG III aircraft. This will eliminate future APU and GPU mobile sources at these gates and fully electrify the gates at STL.</p>			
			
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Signature:		Date:	2/15/2018
Printed Name:	Rhonda Hamm-Niebruegge	Title:	Director of Airports
Phone Number:	314-426-8020	Email:	Rkhamm-niebruegge@flystl.com

**FY 2020 Vale Grant
Lambert-St. Louis International Airport**

February 15, 2018

Project	PCAs	GPUs	Electrical upgrades needed	Total Cost	AIP funding	Airport Match
Stationary Grant						
Gate Electrification						
Gate C27	135,000	80,000	100,000	315,000	236,250	78,750
Gate C29	135,000	80,000	100,000	315,000	236,250	78,750
Gate C30	135,000	80,000	100,000	315,000	236,250	78,750
Gate Project Design				150,000	112,500	37,500
C Concourse Infrastruture			900,000	900,000	675,000	225,000
Project Formulation				75,000	56,250	18,750
Subtotal	405,000	240,000	1,200,000	2,070,000	1,552,500	517,500
Total Cost				2,070,000	1,552,500	517,500

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