

Alternative Fuels & Chemicals Coalition

Advocating for Public Policies to Promote the Development & Production of Alternative Fuels, Renewable Chemicals, Biobased Products, and Sustainable Aviation Fuels

AFCC'S FY2021 Appropriation Requests Transportation

13 Programs – 10 Industry-Critical Priorities

Introduction

he Alternative Fuels & Chemicals Coalition (AFCC) represents companies that make up the value chains for the development, production, and distribution of alternative fuels, renewable chemicals, biobased products, and sustainable aviation fuels (SAF). Its 40+ member companies include: Amyris, Cargill, Clariant, Calysta, Danimer Scientific, Green Life Can, Northwest Advanced Biofuels, Praj Americas, Red Rock Biofuels, Velosys, Vertimass, Virent, and more.

AFCC's FY2021 appropriation requests are **consistent with prior year appropriations**. AFCC's objective is to support robust funding opportunities to stimulate the development and production of alternative fuels, renewable chemicals, biobased products, and SAF.

Here's Why This Is Important

The development and production of these products

offers EVERY state and virtually

EVERY Congressional District an opportunity to

CREATE JOBS and STIMULATE ECONOMIC DEVELOPMENT

Here's How EVERYONE in the U.S. Benefits

- The programmatic funding levels and tax incentives for which AFCC is advocating make it possible for federal agencies to issue funding opportunities to carry out agency missions.
- Funding opportunities are available for each of the nine Technology Readiness Levels (TRLs), which move ideas from concept to commercial realization. These funding opportunities stimulate <u>ingenuity</u>, support <u>innovation</u>, prove out and validate <u>new ideas</u>, lead to the introduction of <u>new products</u> and <u>new technologies</u>, create <u>jobs</u>, <u>improve the quality of life</u>, <u>solve problems</u>, and <u>drive American competitiveness and global leadership</u>.
- These funding programs form a progressive ladder that moves new ideas successively forward, with each step building one upon the other, leading from an early concept (TRL-1), up through research and development, to testing and validation, then to prototyping and piloting, and finally to first commercialization (TRL-9), followed by further expansion and deployment, which is where local communities and everyone in the U.S. benefit.
- **Each TRL step is critical; reduce the funding for one and the others cannot occur.**
- A list of the federal funding programs that are available for each TRL level can be viewed and downloaded on AFCC's website at: https://www.altfuelchem.org/federal-funding-opportunities.



5 Key Points Re: AFCC's FY2021 Appropriation Requests

- 1. The focus of AFCC's appropriations requests is to ensure the continuation and where possible, the expansion of the federal funding opportunities that advance research and development, support testing and validation, and lead to the commercial deployment of new technologies, services, and products.
- 2. These funding opportunities have the potential to benefit every state and Congressional District and their constituents. For example, the majority of AFCC's 45 member companies use waste products to make their products (thus turning liabilities into assets); hence, they can locate new facilities in local communities almost anywhere. Moreover, they distribute and sell products throughout the U.S., which touch the lives of every American, support tens of thousands of indirect and induced jobs, and have a positive economic impact in every Congressional district.
- **3.** These funding opportunities <u>play a critical role in the market economy</u>. They stimulate innovation. They lead to the development of new technologies, services, and products.
- **4. Most importantly,** they prime the pump for private sector investment. They do this by providing the necessary validation and reduction of risk to give private sector investors and lenders the confidence that is needed to put their money into financing new technologies, services and products and deploying them widely throughout the marketplace.
- Without this validation and reduction of risk, very few, if any, private sector investors will take a chance on something that is new, innovative, or disruptive. Thus, the benefits that could accrue to the market economy and American public may never be realized and could be lost forever ... or leave a void for another country, such as China, to replace the U.S. as a global leader.

These funding requests are a top priority since they will have a direct impact on the constituents of every Congressional office

Contact Information

CJ Evans and Rina Singh, PhD
Executive Director and Executive Vice President for Policy

Alternative Fuels & Chemicals Coalition

1200 G Street, NW, Suite 800 Washington, DC 20005

Telephone: 202-922-0144

Emails: cj@AltFuelChem.org and Rina@AltFuelChem.org

Website: www.AltFuelChem.org



Alternative Fuels & Chemicals Coalition

Advocating for Public Policies to Promote the Development & Production of Alternative Fuels & Chemicals, with a Focus on Sustainable Aviation Fuels

AFCC's 2021 Appropriations Requests

HOUSE & SENATE APPROPRIATIONS SUBCOMMITTEES ON TRANSPORTATION

AFCC's priorities – the programs whose authorizations or appropriations have expired or not been renewed, or have been proposed for severe cuts or elimination in the President's Budget – are indicated in red text

Subcommittee: Transportation

Agency: U.S. Department of Transportation (DOT)

13 Programs – 10 Industry-Critical Priorities (including FAA)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions
H.R. 1865 (P.L. 1	•						
Title 1: Extension	of Certain Expirin	ig Provisions; Subt	itle C: Incentives f	or Energy Product	ion, Efficiency, and	d Green Economy J	obs
Bill #:				H.R. 1865			
Dill π.				(P.L. 116-94)			
Title:				1			
Subtitle:	N/A	N/A	N/A	С			
	IN/A	IN/A	IN/A	Secs. 121-127,			
Section:				129-131, and			
				Sec. 133			
Page #:				pgs. 697-700			
						Extend credits	
						for Secs. 121-	
AFCC Request:				See below		127, 129-131,	
						and Sec. 133	
						through 2023	

A Collaborative Government Affairs Effort Organized by Kilpatrick Townsend & Stockton and American Diversified Energy Consulting Services



Agency: U.S. Department of Transportation (DOT)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions		
Notes:	See pages 1 &2 Extended through 2022: Sec. 121 Biodiesel and Renewable Diesel Tax Credit and Excise Tax Extended through 2020: Sec. 122 Second Generation Biofuel Producer Credit, Sec. 123 Nonbusiness Energy Property, Sec. 124 Qualified Fuel Cell Motor Vehicles, Sec. 125 Alternative Fuel Refueling Property Credit, Sec 126 2-Wheeled Plug-In Vehicle Credit, Sec. 127 Credit for Electricity Produced from Certain Renewable Resources, Sec. 129 Energy Efficient Homes Credit, Sec. 130 Special Allowance for Second Generation Biofuel Plant Property, Sec. 131 Energy Efficient Commercial Buildings Deduction, and Sec. 133 Extension and Clarification of Excise Tax Credits Relating to Alternative Fuels								
Language:	Use the bill languag	ge in Title 1 of FY202	O Consolidated Appr	opriations Act, pgs. 6	697-700				
Justification:		<u> </u>		elopment of alternat	tive fuels and biobase	ed products			
	ited States Code, s ssary Charging Infr			orridors					
Bill #:	H.R. 244 (P.L. 115-31)	H.R. 1625 (P.L. 115-66)	H.J. Res. 31 (P.L. 116-6)	H.R. 1865 (P.L. 116-94)					
Division:	K	L	G	Н					
Title:	I	I	I	I					
Section:	N/A	N/A	N/A	N/A					
Page #:	N/A	N/A	N/A	pgs. 413-424					



Agency: U.S. Department of Transportation (DOT)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions			
FY Appropriation	\$0	\$0	\$0	\$781,140,392	\$0	\$781,140,392				
Language:				Use the bill language Consolidated Appre	ge on pgs. 413-424 o opriations Act	f the FY2020				
Justification:	a few years on the facilities and comp to go all-electric wi Section 133(b)(1) I terminal facilities; t installation of vehic	A greatly expanded charging structure will be necessary to accommodate the growing number of electric vehicles that will be in use within a few years on the nation's highways and roads. Manufactures of cars and trucks worldwide are launching electric vehicle manufacturing facilities and competing to introduce new models. Many of the world's leading vehicle manufacturers have announced that they are going to go all-electric within a few years and phase out internal combustion engines. Section 133(b)(1) provides for construction of highways, bridges, tunnels, and local access roads; transit capital projects; ferry boats and terminal facilities; truck parking facilities; and capital improvements to infrastructure-based intelligent transportation systems, including the installation of vehicle-to-vehicle communications equipment and electric charging stations; Section 133(b)(4) provides for highway and transit safety infrastructure improvements.								
	ghway Administra Surface Transpor									
Bill #:	H.R. 244 (P.L. 115-31)	H.R. 1625 (P.L. 115-66)	H.J. Res. 31 (P.L. 116-6)	H.R. 1865 (P.L. 116-94)						
Division:	К	L	G	Н						
Title:	I	1	I	I						
Section:	N/A	N/A	N/A	N/A						
Page #:	pg. 735	pgs. 1591	pg. 395	pgs. 412-414 and 428-436						



Agency: U.S. Department of Transportation (DOT)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions
FY Appropriation	\$43,266,100,000	\$44,234,212,000	\$45,268,596,000	\$46,365,092,000 made available through 2023 (see notes below)	\$810,000,000,000 over 10 years, \$81 billion/year	(1) \$81 billion – (out of \$810 billion over 10 years)	
FY2020 Appropriation Notes:	Administration, Fed \$10.8 billion for T \$1.978 billion for T \$510 million for T \$300 million for t \$225 million for t \$168 million for P \$152.589 million \$70 million for F \$61 million for sa	ransit Formula Gran Capital Investment Transit Infrastructur the Maritime Securit the Port Infrastructur tipeline Safety pg. 4 for Operations and tederal Lands and Tri fety functions and \$ g. 435; Regional Infrastructur Maritime Guarante Ints were included in mental funding (requested) for the Resequested) for Metropole	Grants pg. 430 ⁽¹⁾ ; e Grants pg. 428; cy Program pg. 432; re Development Program pg. 432; bal Projects pg. 413; 24.215 million for opture Accelerator Derect Loan (Title XI) Property of the DOT's FY2020 Extends of the Infra extend inland waterway suarch, Technology, and	g was appropriated: gram pg. 434; perational expenses for the second of the second o	for the Pipeline and n pg. 413; and were not delineated ovide increased flexing projects; m(1);	Hazardous Materials in the FY2020 Conso bility to address mul	s Safety lidated



Agency: U.S. Department of Transportation (DOT)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions					
Language:	shall be no less than	Per Administration request, with the stipulation that the minimum amount of annual funding for the Capital Investment Grants program shall be no less than twenty (20) percent of the program's historic funding levels, and no less than \$300 million per year for the Department's Research, Technology, and Education Program and the Transportation Infrastructure Finance and Innovation Act (TIFIA) program										
Justification:	The 2015 Fixing Am term funding certai fiscal years 2016 thi	ee pages 1 & 2 and (1) below. the 2015 Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94) was the first federal law in over a decade to provide long- erm funding certainty for surface transportation infrastructure planning and investment. The 2015 FAST Act authorized \$305 billion over scal years 2016 through 2020 for highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, ail, and research, technology, and statistics programs.										
DOT: Office of th National Infrastr	e Secretary; ucture Investment	_s (2)										
Bill #:	H.R. 244 (P.L. 115-31)	H.R. 1625 (P.L. 115-66)	H.J. Res. 31 (P.L. 116-6)	H.R. 1865 (P.L. 116-94)								
Division:	K	L	G	Н								
Title:	I	I	1	1								
Section:	N/A	N/A	N/A	N/A								
Page #:	pg. 726	pg. 1567	pg. 384	pg. 401								
FY Appropriation	\$500,000,000	\$1,500,000,000	\$900,000,000	\$1,000,000,000	\$1,000,000,000	(2) \$1,000,000,000						
Language:	Appropriation Act. A at the end of the pa											



Agency: U.S. Department of Transportation (DOT)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions		
Justification:	in road, rail, transit Previously known a nearly \$7.9 billion f In each competition transportation net getting the highest The eligibility requ jurisdictional proje example, which pla BUILD can provide authorities, tribal g of applicants (most This flexibility allow	g Investments to Le t, and port projects to as Transportation In for eleven rounds of on, DOT receives he works. The BUILD p value for every doll- uirements of BUILD cts that are more dif- iny a critical role in out- e capital funding the governments, MPOs, thy State DOTs and transports.	nvestment Generation National Infrastruction Undreds of application of application of ar invested. allow project sponificult to support through discretionary or others in contrastransit agencies).	eve national transporting Economic Recoverure Investments to full and reference of the examine these parts at the State arough traditional DOT light but have limited grants directly to set to traditional Federand local levels to we	ertation objectives. ery, or TIGER Discret and projects that have epair critical pieces projects on their me and local levels to comprograms. BUILD can discources of Federal feany public entity, in eral programs which	ionary Grants, Cong ye a significant local of of the nation's freig erits to help ensure obtain funding for m in fund port and freig funds. including municipaliti provide funding to v	ress has dedicated or regional impact. Ight and passenger that taxpayers are multi-modal, multi-ht rail projects, for ies, counties, port ery specific groups own, operate, and		
	he Assistant Secretary for echnology (OST-R) (3)								
Bill #:	H.R. 244 (P.L. 115-31)	H.R. 1625 (P.L. 115-66)	H.J. Res. 31 (P.L. 116-6)	H.R. 1865 (P.L. 116-94)					
Division:	K	L	G	Н					
Title:	I	ı	I	ı					
Section:	N/A	N/A	N/A	N/A					



Agency: U.S. Department of Transportation (DOT)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions
Page #:	pg. 591	pg. 1565	pg. 384	pg. 401			
FY Appropriation	\$13,000,000	\$23,465,109	\$8,471,000	\$21,000,000	\$11,000,000	(3) Restore to \$21,000,000	
Language:					ge from FY2020 Cons pg. 401, with AFCC's		
Justification:	opportunities for rinnovation, technostatistics and information. The OST-R's progration of the	e to all of DOT's pro- esearch collaboratio blogy development, mation to decision-nams include: ransportation Statist int, freight transport vironmental sustain search, Development ion Safety Institute; Navigation and Tim	n and coordinating r and breakthrough k nakers. tics, which tracks and tation, infrastructure ems Join Program C ability; at & Technology (RD and ing (PNT) and Spect	s statistics and reservesearch activities and reservesearch activities and reservesearch activities and reports national trace, passenger travel, office conducts research described below; rum Management Pring System (GPS) ar	d budgetary resource research; foster techniques ansportation statistic safety, system performed arch on all major more rogram which overs	es across DOT. Its michnology transfers; acts on airlines and airpformance, and transpodes to advance trainees PNT requiremen	ession is to advance and provide useful ports, ports, energy sportation and the ensportation safety
	e Assistant Secret lanning, Research		earch, Developmer 3)	nt & Technology			
Bill #:	H.R. 244 (P.L. 115-31)	H.R. 1625 (P.L. 115-66)	H.J. Res. 31 (P.L. 116-6)	H.R. 1865 (P.L. 116-94)			



Agency: U.S. Department of Transportation (DOT)

13 Programs – 10 Industry-Critical Priorities (including FAA)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions
Division:	K	L	G	Н			
Title:	1	1	1	ı			
Section:	N/A	N/A	N/A	N/A			
Page #:	pg. 727	pg. 1572	pg. 878	pg. 403			
FY Appropriation	\$12,000,000	\$14,000,000	\$7,879,000	\$10,879,000	\$9,400,000	(3) Restore to \$10,879,000	
Language:				Use the bill language Consolidated Appr	ge from pg. 403 of th opriation Act	ne FY2020	
Justification:	programs It operates the maintain a <i>Conso</i> It manages and e	DOT's Research Huk lidated Research Da	to foster research tabase. Ition of grants alloca	overseas research of coordination and of the desired to selected Univ ing the DOT's research	ollaboration and me	eet FAST Act require	ements for DOT to

See next page for Federal Aviation Administration (FAA) requests



Agency: U.S. Department of Transportation (DOT) Federal Aviation Administration (FAA)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions				
	ation Administrati										
Research, Engine	ering and Develop										
Bill #:	H.R. 244 (P.L. 115-31)	H.R. 1625 (P.L. 115-66)	H.J. Res. 31 (P.L. 116-6)	H.R. 1865 (P.L. 116-94)							
Division:	K	L	G	Н							
Title:	1	1	I	I							
Section:	N/A	N/A	N/A	N/A							
Page #:	pg. 591	pg. 1586	pg. 388	pg. 408							
FY Appropriation	\$176,500,000	\$188,900,000	\$191,100,000	\$192,665,000	\$170,000,000	Restore to \$192,665,000					
Language:				•	ge from pg. 408 of th opriation Act with Al						
Justification:	See pages 1 & 2 This division carries out work in multiple research areas including:										
	DOT: Federal Aviation Administration; Priority #4 - Grants-in-Aid for Airports / Airport Improvement Program (AIP) (4)										
Bill #:	H.R. 244	H.R. 1625	H.J. Res. 31	H.R. 1865							
DIII #:	(P.L. 115-31)	(P.L. 115-66)	(P.L. 116-6)	(P.L. 116-94)							
Division:	K	L	G	Н							



Agency: U.S. Department of Transportation (DOT) Federal Aviation Administration (FAA)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions		
Title:	1	I	I	I					
Section:	N/A	N/A	N/A	N/A					
Page #:	pg. 732	pgs. 1583 and 1585	pgs. 392 and 393	pg. 409 and 410					
FY Appropriation	\$3,750,000,000	\$3,350,000,000 (pg. 1583) as well as an additional \$1,000,000,000 (pg. 1585) to remain available through Sept. 30, 2020 for airport development discretionary grants	\$3,350,000,000 (pg. 392) as well as an additional \$500,000,000 (pg. 393) to remain available through Sept. 30, 2021 for airport development discretionary grants	\$3,350,000,000 (pg. 409) as well as an additional \$400,000,000 (pg. 410) to remain available through Sept. 30, 2022 for airport development discretionary grants	\$3,350,000,000 but \$0 for additional airport development discretionary grants	\$3,350,000,000 (4) as well as an additional \$400,000,000 to remain available through Sept. 30, 2023 for airport development discretionary grants			
Language:	from page 410 authorized under under this head	4) Use the bill language from pgs. 409 and 410 of the FY2020 Consolidated Appropriation Act; stipulate in the language from page 410 appropriating an additional amount for "Grants-In-Aid for Airports" to make grants for projects authorized under subchapter 1 of chapter 47 of title 49, United States Code, "That of the amounts made available under this heading, the Secretary shall make grants to enable airports to make necessary infrastructure changes to facilitate the use of alternative aviation fuel;"							



Agency: U.S. Department of Transportation (DOT) Federal Aviation Administration (FAA)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions		
Justification:	See pages 1 & 2 and (4) below Includes: airport grants to preserve and improve critical airport infrastructure; airport technology research, including the safe and efficient integration of new and innovative technologies into the airport environment; and the Airport Cooperative Research Program (ACRP) to carry out applied research on problems that are shared by airport operating agencies and are not being adequately addressed by existing Federal research programs.								
	ation Administrati								
Bill #:	H.R. 244 (P.L. 115-31)	H.R. 1625 (P.L. 115-66)	H.J. Res. 31 (P.L. 116-6)	H.R. 1865 (P.L. 116-94)					
Division:	К	L	G	Н					
Title:	I	I	I	1					
Section:	N/A	N/A	N/A	N/A					
Page #:	pg. 731	pg. 1581	pg. 390	pg. 408					
FY Appropriation	\$24,800,000*	\$26,800,000*	\$33,000,000*	\$40,900,000*	\$26,600,000	(5) \$33,000,000			
Appropriation Note:	*Included under FY2017 appropriation of \$2,855,000,000 for Facilities and Equipment; the amount	*Included under FY20218 appropriation of \$3,250,000,000 for Facilities and Equipment; the amount	*Included under FY20219 appropriation of \$3,000,000,000 for Facilities and Equipment; the amount	*Included under FY2020 appropriation of \$3,045,000,000 for Facilities and Equipment; the amount					



Agency: U.S. Department of Transportation (DOT) Federal Aviation Administration (FAA)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions			
	allocated to this this program is shown in DOT's FY2019 Budget	allocated to this this program is shown in DOT's FY2019 Budget	allocated to this this program is shown in DOT's FY2021 Budget	allocated to this program is shown in DOT's FY2021 Budget						
	Highlights, pg. 24	Highlights, pg. 24	Highlights, pg. 22	Highlights, pg. 22						
	request for the Tec	hnology and Prototy	pe Division provided	ated Appropriation A d in the bill's report I	anguage.					
Language:	<i>further,</i> That of	Add a stipulation in the FY2021 appropriations language for FACILITIES AND EQUIPMENT which states: "Provided further, That of the amounts made available under this heading, the Secretary shall give priority to installing and making the necessary infrastructure changes at airports to facilitate the use of alternative aviation fuels."								
	See pages 1 & 2 an	d ⁽⁵⁾ below								
Justification:	The Technology De	evelopment and Pro	•	nducts prototyping, which are critical to			•			
	implementatio	on of changes for acc	commodating alterna	FY2021 appropriatir ative fuels use can be required for U.S. carr	e carried out now. A	lternative aviation fu	uels are becoming			
DOT: Federal Avi	ation Administrati	on; Research, Eng	ineering and Deve	lopment (RE&D);						
NextGen (Next G	eneration Air Tran	sportation Systen	n)							
Bill #:	H.R. 244 (P.L. 115-31)	H.R. 1625 (P.L. 115-66)	H.J. Res. 31 (P.L. 116-6)	H.R. 1865 (P.L. 116-94)						
Division:	K	L	G	Н						
Title:	I	I	I	I						
Section:	N/A	N/A	N/A	N/A						



Agency: U.S. Department of Transportation (DOT) Federal Aviation Administration (FAA)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions	
Page #:	pg. 730	pg. 1577	pg. 432	pg. 407 (5)				
FY Appropriation	\$60,155,000	\$60,000,000	\$61,796,000	\$61,538,000	\$69,300,000	\$69,300,000		
Language:				Use the language on pg. 407, subparagraph (5), of the FY2020 Consolidated Appropriations Act, with the FY2021 appropriation request.				
Justification:	The NextGen office oversees the NextGen program, which encompasses the planning, development, and implementation of innovative new technologies and airspace procedures after thorough testing for safety.							
DOT: NextGen; Management Services; Priority #3 - FAA Centers of Excellence (6)								
Appropriation:	Included in NextGen appropriation above	Included in NextGen appropriation above	Included in NextGen appropriation above	Included in NextGen appropriation above				
FY DOT Funding Allocation						(6) Continue prior year funding levels		
Language:				(6) Continue prior year funding levels per report language for the FY2020 Consolidated Appropriation's Act				
Justification:	See pages 1 & 2 and ⁽⁶⁾ below							
DOT: NextGen;								



Agency: U.S. Department of Transportation (DOT) Federal Aviation Administration (FAA)

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions	
Priority #2 - Environmental Research: Aircraft Technologies, Fuels, and Metrics (7)								
Appropriation:	Included in NextGen appropriation above	Included in NextGen appropriation above	Included in NextGen appropriation above	Included in NextGen appropriation above				
Funding Level Reference:	DOT FY2018 Budget Highlights	DOT FY2019 Budget Highlights	DOT FY2020 Budget Highlights	DOT FY2021 Budget Highlights				
Page #:	pg. 10	pg. 5	pg. 29	pg. 26				
FY DOT Funding Allocation	\$27,200,000	\$26,900,000	\$29,200,000	\$29,200,000	\$27,000,000	(7) Ensure that at least \$29,200,000 is allocated to this program		
Language:	(7) & (8) Use the language on pg. 407, subparagraph (5), of the FY2020 Consolidated Appropriations Act, with the following stipulation added to the FY2021 appropriations language: "Provided, That of the amount made available, the Secretary shall use not less than \$29,200,000 for Aircraft Technologies, Fuels, and Metrics and the Office of Environment and Energy, and not less than \$7,000,000 for Alternative Fuels for General Aviation;"							
Justification:	See pages 1 & 2 and (7) below. The Aircraft Technologies, Fuels, and Metrics program is focused on maturing aircraft innovative technologies that can reduce aircraft noise, emissions that degrade air quality, greenhouse gas emissions, and energy use, and advance alternative jet fuels. As part of this program, the Office of Environment and Energy works to advance understanding of aviation noise and emissions at their source, how they propagate and are modified in the atmosphere, and their ultimate health and welfare impacts.							



Agency: U.S. Department of Transportation (DOT) Federal Aviation Administration (FAA)

7 Programs – <u>6 Industry-Critical Priorities</u>

Account / Program:	FY 2017 Appropriation	FY 2018 Appropriation	FY 2019 Appropriation	FY 2020 Appropriation	President's FY 2021 Budget	AFCC's FY 2021 REQUEST	Pending Actions	
DOT: Federal Aviation Administration; Operations; Research, Engineering And Development (RE&D); NextGen; Priority #1 - Alternative Fuels for General Aviation (8)								
Appropriation:	Included in NextGen appropriation above	Included in NextGen appropriation above	Included in NextGen appropriation above	Included in NextGen appropriation above				
Funding Level Reference:	DOT FY2018 Budget Highlights	DOT FY2019 Budget Highlights	DOT FY2020 Budget Highlights	DOT FY2021 Budget Highlights				
Page #:	pg. 10	pg. 5	pg. 29	pg. 25				
FY DOT Funding Allocation	\$7,000,000	\$6,900,000	\$1,900,000	\$1,900,000	\$0	(8) Ensure that at least \$7 million is allocated to this program		
Language:	(7) & (8) Use the language on pg. 407, subparagraph (5), of the FY2020 Consolidated Appropriations Act, with the following stipulation added to the FY2021 appropriations language: "Provided, That of the amount made available, the Secretary shall use not less than \$29,200,000 for Aircraft Technologies, Fuels, and Metrics and the Office of Environment and Energy, and not less than \$7,000,000 for Alternative Fuels for General Aviation;"							
Justification:	See ⁽⁸⁾ below							

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(1) AFCC APPLAUDS THE ADMINISTRATION'S REQUEST TO EXTEND THE FAST ACT FOR ANOTHER 10 YEARS WITH \$81 BILLION IN ANNUAL FUNDING. AFCC recommends that The Capital Investment Grants program, which goes toward funding major transit projects, be expanded commensurate with the increased annual funding levels being requested by the Administration, with the stipulation that the minimum amount of funding for this program shall be no less than 20% of the program's historic funding levels.

The research grants made under this program typically require matching funds. Thus, they allow DOT to leverage industry and academia investment in new technology. They also support the training of new experts in new technologies such as alternative fuels technology.

<u>AFCC also recommends</u> that the language extending the FAST Act stipulate that the DOT's Research, Technology, and Education Program and Transportation Infrastructure Finance and Innovation Act (TIFIA) program shall receive no less than \$300 million per year.

(2) <u>AFCC STRONGLY SUPPORTS</u> continued funding at the level proposed by the Administration for the National Infrastructure Investments / BUILD Transportation Discretionary Grant Program. The BUILD program allows DOT to make capital funding grants through discretionary grants to any public entity, including municipalities, counties, port authorities, tribal governments, metropolitan planning organization, or others to projects that have a significant local or regional impact and promise to achieve national transportation objectives.

AFCC RECOMMENDS that legislative language be added under NATIONAL INFRASTRUCTURE INVESTMENTS, pg. 401 of the FY2020 Consolidated Appropriation Act, in the first "Provided Further," after the semicolon at the end of the parenthetic phrase ending "ports of energy)" and before "and", add: "investments in the necessary infrastructure for charging electric vehicles and for producing, transporting, dispensing, and using alternative fuels;"

(3) <u>AFCC STRONGLY SUPPORTS</u> CONTINUED AND INCREASED FUNDING FOR RESEARCH, ENGINEERING, AND DEVELOPMENT OF ALTERNATIVE AVIATION FUELS.

The Federal Aviation Administration (FAA) agency plays an import role in bringing alternative fuels from the lab to the airport. Activities include setting policy goals, ensuring that the fuels can be safely integrated with aviation equipment and infrastructure. In the past, FAA program funding included specific appropriations for these activities. In recent budgets, the emphasis has changed to place less emphasis on this economically critical area.

A significant portion of the FAA research and development budget is provided from the Airport and Airways Trust Fund, under 49 U.S.C, Subtitle VII, section 48102(a) which was recently reauthorized in 2018 (H.R. 302). The congressional bill included specific appropriation levels through 2020 (https://www.congress.gov/bill/115th-congress/house-



<u>bill/4/text)</u>. However, the enacted bill did not include those previsions which also specifically listed alternative aviation fuels as a topic for potential funding. The funding decisions and budgets for these programs are determined by an advisory board. In the place of the specific research suggestions, Sec. 742 of H.R. 302 calls for a Technology review by the Administrator of the Federal Aviation Administration, in coordination with the Administrator of the National Aeronautics and Space Administration, of current and planned research on the use of advanced aircraft technologies, innovative materials, alternative fuels, additive manufacturing, and novel aircraft designs, to increase aircraft fuel efficiency

(4) <u>AFCC RECOMMENDS that an additional amount of \$400,000,000 be appropriated</u> for Grants-in-Aid for Airports, consistent with the annual appropriations for FY2018-2020,

and that language be added to the FY2020 appropriating language stipulating:

"That of the amounts made available under this heading, the Secretary shall make grants to enable airports to make necessary infrastructure changes to facilitate the use of alternative aviation fuel."

(5) <u>AFCC RECOMMENDS</u> adding a stipulation to the FY2021 appropriations language for FACILITIES AND EQUIPMENT which states: "Provided further, That of the amounts made available under this heading, the Secretary shall give priority to installing and making the necessary infrastructure changes at airports to facilitate the use of alternative aviation fuels."

For example, in some cases the fuel will need to trucked into the airport rather than arriving from current pipeline networks. New pipelines may be required. The DOT infrastructure project will need to consider these changes. Now is the time for the planning and implementation of these changes as alternative fuels use becomes more common. Alternative aviation fuels are becoming the norm in many international markets and could be required for U.S. carriers serving these locations in the future. Currently these types of projects are not among those discussed in the agency's request.

(6) <u>AFCC STRONGLY SUPPORTS</u> continued funding for the Office of the Assistant Secretary, Development and Technology, FAA Centers of Excellence (COE) Program for alternative jet fuels and environment research since it is considered the largest DOT program attempting to develop new sustainable alternative fuels.

Centers of air transportation excellence established under section 44513 of Title 49 are funded by the Airport and Airway Trust under section 48102(a) of title 49. Since its inception, FAA made a major commitment to support multiyear and multimillion dollar research efforts, ensuring coordination and innovation across the university teams that make up the various COEs. This investment has resulted in significant advancements in aviation science, technologies, and technology transfer. There are currently six active established FAA COEs, each with specific research areas. The goal is for each center to become a national resource



in a particular area of transportation. The COE program has included over 70 academic institutions and over 200 industry and government affiliates. Through their collaborative efforts, they have conducted research in areas critical to the FAA and the flying public.

AFCC STRONGLY URGES CONTINUED FUNDING AT PRIOR YEAR APPROPRIATION LEVELS for the NextGen—Environmental Research—Aircraft Technologies, Fuels, and Metrics program of the Office of Environment and Energy. The stated goal of the Aircraft Technologies, Fuels, and Metrics program is to increase mobility by reducing environmental impacts of aviation in absolute terms, including those relating to community noise, air quality and global climate change. The program is focused on maturing aircraft innovative technologies that can reduce aircraft noise, emissions that degrade air quality, greenhouse gas emissions, and energy use, and advance alternative jet fuels.

The Office of Environment and Energy is a key component of the FAA's environment and energy strategy. It advances understanding of aviation noise and emissions at their source, how they propagate and are modified in the atmosphere, and their ultimate health and welfare impacts on the population – both near airports and much farther afield. This knowledge is then incorporated into an integrated aviation environmental tool suite that can be used to evaluate the full breadth of environmental mitigation solutions that are being developed. The aviation environmental tool suite is built upon a sound scientific understanding of aviation noise and emissions as well as their environmental, health, and welfare impacts. The Program is using these models and knowledge to inform decision-making on technology development, operational procedures, and policies relating to aviation's energy use and environmental impacts.

AFCC RECOMMENDS adding a stipulation to the FY2021 appropriations language for the NextGen program which states:

"Provided, That of the amount made available, the Secretary shall use not less than \$29,200,000 for Aircraft Technologies, Fuels, and Metrics and the Office of Environment and Energy, and not less than \$7,000,000 for Alternative Fuels for General Aviation;"

This appropriations language also applies to (8) below:

(8) <u>AFCC STRONGLY RECOMMENDS</u> increasing – and NOT eliminating – funding for the production of Alternative Fuels for General Aviation. Programs aimed at improving the sustainability and competitiveness of the U.S. transportation system in today's increasingly environmentally conscious world need to be protected as they compete with other priorities. AFCC and its member companies have a strong focus on alternative feedstocks and fuels for aviation, which are typically derived from biological and renewable resources, and are sustainably produced in the U.S.



Their adoption promotes the use of home grown agricultural crops, helping our farmers, advancing innovation, creating jobs, and in turn building the nations biobased economy. There is growing international demand for these biofuels and mandates in the EU and other areas of the world may require their use in overseas flights and in the U.S. military. Adoption of alternative fuels supports the USA's leadership in green technologies and AFCC strongly recommends funding research for a cleaner and healthier environment.