

### **Board Report:**

# Massachusetts Statewide Aviation System Plan Update, Massachusetts Aviation Caucus Meeting & Sustainable Aviation Fuel

October 20, 2021

Presented to

Board of Directors

Presented by:

■ Aeronautics Division

➤ Dr. Jeff DeCarlo

### **Massachusetts Statewide Aviation System Plan Update**

- Aeronautics will undertake an update to their previous Massachusetts
   Statewide Airport System Plan (MSASP) that was completed in 2010.

   The new study will focus on the Statewide Aviation System as a whole
- The plan will envision the role of aviation in Massachusetts as supporting the State's multi-modal environment, focusing on equity and sustainability
- The MSASP Update will explore new and future NextGen technologies such as Advanced Air Mobility (AAM) and provide a summary of Massachusetts' overall air transportation needs for the next 20 years
- The MSASP will run parallel to and align with MassDOT's schedule for the 2050 Massachusetts Statewide Long Range Transportation Plan
- The MSASP will integrate aviation needs into broader transportation, land use, and environmental objectives for the Commonwealth and will guide future funding decisions for airports
- The project is expected to begin in late fall and be completed within 18 months



Massachusetts Statewide Airport System Plan



## Massachusetts Aviation Caucus Meeting September 22, 2021

- Massachusetts Department of Transportation Aeronautics Division
- MassDOT joined the FAA NE Region Deputy Administrator, state legislators Senator Velis & Representative Blais, and members of the Massachusetts Airport Management Association (MAMA) to discuss the current status of aviation in the Commonwealth
- The interactive discussion provided information on how to implement innovative technologies and build public private partnerships that support business and workforce development

Panel Topics of Discussion		
Economic Impact of Aviation in Massachusetts	MassDOT Unmanned Aircraft Initiatives	
FAA New England Region Update	Transportation Infrastructure Bill	
Statewide Capital Programs	Future of Work Challenges	
How Massachusetts Can Compete in the Aviation Industry	Positioning MA to Lead in the Electrification of Aviation	





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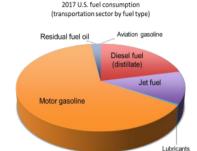
### **Sustainable Aviation Fuel (SAF)**



- MassDOT Aeronautics Division leadership participated in SAF discussions with other state aviation leaders at the annual conference of the National Association of State Aviation Officials
- Sustainable Aviation Fuel (SAF) is a clean substitute for traditional fuels such as (Jet-A)
- Approximately 3% of the world's carbon emissions and 12% of the 2017 U.S. fuel consumption comes from the aviation sector
- SAF is produced by collecting feedstock (i.e. waste oils, household waste, and forestry waste) and converting it to sustainable aviation fuel (SAF)
- From waste-to-aircraft, production of SAF can reduce the lifecycle carbon output of greenhouse gas emissions by up to 80%



#### Sustainable Aviation Fuel (SAF) Lifecycle Diagram (© Air BP)



2017 U.S. transportation fuel consumption (billion gallons per year)

Fuel <sup>1</sup>	Amount <sup>2</sup>	typical use
Motor Gasoline	137.6	light duty (cars)
Distillate Fuel Oil	45.8	trucks/rail/bus
Jet Fuel	25.8	jets (turbines)
Residual Fuel Oil	4.6	ships
Lubricants	0.9	all
Aviation Gasoline	0.2	cylinder aviation
Propane (other C3)	0.1	buses

1 LNG not reported, 2 billion gallons/year

Data source: HTTPS://www.eia.gov/totalenergy/data/monthly/index.php#petroleum

2017 Fuel Consumption in the United States

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