

AGRICULTURE AND SUSTAINABILITY AT ILLINOIS AIRPORTS

Agriculture is one of Illinois largest industries and a significant contributor to the state's economy. Illinois is home to over 72,000 farms that cover 27 million acres, or 75 percent of the state's total land area. Illinois farms and agricultural practices contribute almost \$19 billion annually to Illinois' economy. Illinois' airports play a key role in supporting the state's agricultural industry by hosting aerial applicators and sharing their land with crops and livestock in sustainable ways. Illinois airports also support agriculture and the preservation of the natural environment through sustainability initiatives and practices.

AERIAL APPLICATORS AT ILLINOIS AIRPORTS

Illinois' agriculture offerings are diverse as the state serves as a top producer of soybeans, corn, and swine in the United States. Illinois' climate and soil diversity also allows farmers to grow specialty crops such as buckwheat and horseradish. The state also produces other agriculture commodities such as cattle, wheat, oat, sorghum, hay, sheep, poultry, fruits, and vegetables. Illinois' large agriculture industry relies on agriculture support industries and businesses such as aerial applicators. Aerial applicators spray crops with crop protection products from above via specialty aircraft. Aerial application permits large and remote areas to be treated more efficiently than from the ground and allows for uniform application, while avoiding the trampling of crops. Aerial applicators are located at airports across Illinois including Pontiac Municipal Airport (PNT), Coles County Memorial Airport (MTO), Decatur Airport (DEC), Mercer County Airport (C00), Logan County Airport (AAA), Earlville Airport (C94), Morris Municipal Airport (C09), and Cooksville Airport.¹ Collectively, these aerial applicator businesses contribute over 80 direct jobs to the Illinois economy.

CROP PRODUCTION AND LAND SHARING AT CHICAGO O'HARE INTERNATIONAL AIRPORT

Illinois airports also contribute to the agriculture industry by producing vegetables crops directly on-site, as well as providing land for livestock. An example of Illinois airports producing agriculture and supporting products is the Chicago O'Hare International Airport (ORD). In 2011, the airport established an apiary, an area designated for beehives, in previously vacant and undeveloped land. The apiary contains about 75 beehives and over one million bees and was denoted as one of the largest airport apiaries in the world. The apiary produced 1,200 pounds of honey in its first year of operation. Honey from the apiary is processed and sold throughout Illinois. ORD also produces herbs and vegetables from its aeroponic garden. The aeroponic garden was the first at any world airport. Up to 1,100 plants can be grown in the garden at once and produce from the garden is sold to airport travelers and used in airport restaurants.

In addition to producing crops, ORD supports the state's agriculture industry by providing grazing land for livestock. The airport began providing grazing area in 2013 in effort to maintain vegetation at the airport in an environmental and sustainable manner. Grazing sites are in areas away from the airfield and are surrounded by security fencing. Up to 145 animals can be supported in the airport's grazing area.

¹ Illinois Agricultural Aviation Association (IAAA) 2019



AGRICULTURE AND SUSTAINABILITY AT ILLINOIS AIRPORTS

ILLINOIS AIRPORTS - LEADING THE WAY IN SUSTAINABILITY

Sustainability practices and initiatives are not uncommon undertakings at ORD and the Chicago Midway International Airport (MDW), Chicago's two busiest commercial airports managed by the Chicago Department of Aviation (CDA). Over the past two decades, CDA has been tremendously proactive in developing initiatives and goals to maintain a sustainable environment at both airports. These sustainability efforts include balanced earthwork plans (BEP), a green roof initiative, and the use of green vehicles.

CDA initiated the BEP to reduce hauling, labor, fuel costs, emissions, and traffic congestion, and to keep as much excavated soil on airport site during ORD's Modernization Program. The implementation of the BEP allowed CDA to achieve their triple bottom line of being economically viable, socially responsible, and environmentally sound. The soil that CDA has kept on-site has either been reused as part of new projects or is stockpiled for future use. By keeping soil on-site, CDA has saved more than 850,000 truck trips, 9.6 million gallons of fuel, and reduced over 97,000 tons of carbon dioxide. Additionally, nearly 100 trees have been rescued from demolition sites and replanted at various CDA facilities. ²

Other sustainability initiatives at ORD include the installation of vegetated green roofs and installation of electric vehicles charging stations. There are approximately 529,000 square feet of vegetated green roofs installed at ORD. Vegetated green roofs prolong a roof's lifespan, reduce energy costs, reduce stormwater runoff, and improve air quality at airports. In addition to green roofs, CDA has installed electric vehicle charging stations at ORD and MDW in support of Chicago's goal to reduce greenhouse gas emissions. Currently, 30 public Level II EV charging stations are located at ORD and three are located at MDW. In addition to the EV charging stations, CDA operates alternatively fueled and hybrid fleet vehicles and provides designated hybrid vehicle parking at both airports.



² Ibid

SUMMARY

Illinois airports support the state's expansive agriculture industry by hosting aerial applicators and agriculture support businesses and by contributing airport land for crop and livestock space. Illinois airports also support Illinois' natural environment with various sustainability efforts, most notably at Chicago O'Hare International Airport (ORD). Sustainability efforts to date consist of energy efficiency improvements and conservation, operating alternatively-fueled and hybrid fleet vehicles, vegetated green roofs, and implementing balanced earthwork plans (BEP).