



Legislation Text

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TruWeather Solutions Presentation

PURPOSE/BACKGROUND:

TruWeather Solutions ("TWS") was awarded a NASA Langley sponsored grant to improve detection of wind hazards caused by buildings in urban areas. It is partnering with Hampton University, Longbow and NASA to establish an Urban Weather Test Bed in downtown by deploying approximately 30 weather measurement devices. This research will aid in the operations of Unmanned Aerial Systems.

Staff has been assisting TWS to locate 24 sensors on 9 private buildings. It currently has 4 installed and operational. TWS has submitted an Encroachment Application to the City of Hampton to locate 6 sensors in public rights-of-way. Staff, along with the City Attorney's Office, is reviewing the application.

Discussion:

The NASA SBIR project will provide the necessary sensing infrastructure suitable for low altitude electric vertical take off and landing operations in urban areas to detect different wind hazards, namely low level wind shear. A key component in making any urban weather infrastructure investment in support of drone and air taxi operations is determining the desired locations of vertiports and key airspace routes.

The purpose is to close significant weather measurement gaps in urban areas and along future Advanced Air Mobility routes drones and air taxis will fly. These projects are focused in the City of Hampton.

Impact:

Allowing for the installation of these sensors will create a first of its kind in the country. The data and research will be provided by NASA Langley as it continues its pursuit of understanding the obstacles and implications on introducing unmanned systems to the nation's airspace. These activities support NASA Langley, the growth of private companies and the expansion of an unmanned systems cluster which is important to the City's ongoing economic strategic priorities.

Recommendation:

Provide guidance to staff.

N/A