

AGENDA NOTE - HRPDC QUARTERLY COMMISSION MEETING

ITEM 6#: CLIMATE CHANGE/SEA LEVEL PRESENTATION

SUBJECT:

To effectively address issue of sea level rise, the region needs to acquire highly accurate, consistent regional LIDAR coverage.

BACKGROUND:

During previous HRPDC staff presentations on the issues of climate change and sea level rise, the staff has pointed out the critical need for an accurate consistent coverage of the region with LIDAR elevation data. LIDAR is the acronym for **L**ight **D**etection **A**nd **R**anging systems. Integrating lasers, Global Position Systems (GPS) and inertial navigation systems (INS), LIDAR produces more accurate elevation data than any of the individual technologies. In November 2009, the HRPDC endorsed a proposal by the state to acquire LIDAR data for a portion of the Virginia Coastal Plain, including part of Hampton Roads. Although the state was successful in obtaining funding, the available funds were not sufficient to acquire coverage in Hampton Roads. They are being used in adjacent localities. Some Hampton Roads localities have obtained LIDAR data for all or portion of the locality.

Dr. James V. Koch, President Emeritus and Board of Visitors Professor of Economics at Old Dominion University, has developed a research proposal that could assist the region in making the case for additional state or federal funding to obtain the necessary data.

Dr. Koch will brief the Commission on the issue of sea level rise, the need for LIDAR data and his preliminary thoughts on the financial implications of sea level rise to the region.

RECOMMENDED ACTIONS:

The HRPDC should partner with Dr. Koch on a cooperative preliminary assessment of the economic and financial implications of sea level rise on Hampton Roads.

The HRPDC should aggressively pursue funding to support acquisition of high resolution and consistent LIDAR elevation data for all of Hampton Roads.

STAFF COMMENTARY:

The HRPDC, at its February 2010 retreat identified climate change and sea level rise as a critical issue for consideration during 2011. The HRPDC staff is continuing its analysis of climate change and sea level rise issues as the basis for developing a framework for mitigating the negative impacts. Dr. Koch's work should complement those efforts.