

## **AGENDA NOTE - HRPDC EXECUTIVE COMMITTEE MEETING**

### **ITEM #15: SEA LEVEL RISE PROPOSAL - ODU**

#### **SUBJECT:**

To conduct, in cooperation with Dr. James Koch, Regional Studies Institute at Old Dominion University, a preliminary assessment of the economic and financial implications of sea level rise on Hampton Roads.

#### **BACKGROUND:**

At the July 21, 2010 Quarterly Commission Meeting, Dr. Koch provided a presentation on the issue of sea level rise, a proposed analysis of the financial and economic implications of sea level rise on Hampton Roads and the need, as previously recommended in several studies, for accurate and 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.

At the July 21, 2010 meeting, the HRPDC directed the staff to work with Dr. Koch on a more detailed proposal and bring it back to the Commission for consideration. Attached is the draft proposal that has been developed for consideration. The project is proposed at a cost of \$110,000 to be split 50-50 between Old Dominion University and the Hampton Roads Planning District Commission (HRPDC). The total cost to the HRPDC is \$55,000.

#### **RECOMMENDED ACTIONS:**

Authorize the Executive Director to contract with Dr. Koch to undertake this preliminary assessment of the economic and financial implications of sea level rise on 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. This project is one of a number of climate change sea level initiatives being proposed or considered for Hampton Roads. In aggregate, these efforts will assist the region in developing the needed framework for responding to rising sea level.

Attachment

## AGREEMENT

This is an agreement between the Hampton Roads Planning District Commission (HRPDC) and the Regional Studies Institute (RSI) in the Department of Economics at Old Dominion University (ODU).

**Purpose:** The HRPDC and the RSI agree to a cooperative research project focusing upon the economic impact of rising water levels and storm surges on: (1) the value of property, structures and assets located in selected areas of Hampton Roads; and, (2) the volume and value of economic activity in these selected areas of Hampton Roads. Neither time nor available resources will allow the project to include the entire Hampton Roads region. Therefore, it will focus on a sample of smaller areas within as many cities within the region as possible. The units of analysis may be census tracts, zip codes, or identifiable neighborhoods. The goal is to provide HRPDC members with reliable data concerning (1) and (2) in a sample of strategic areas of their cities and counties. An effort will be made to represent as many cities and counties within Hampton Roads as possible and to include in the analysis a variety of kinds of property---residential, commercial, critical infrastructure, etc. A complete, region-wide analysis may follow at some point in the future, but is neither planned nor funded at this time.

**Division of Labor:** Both parties understand that the RSI will bear primary responsibility for generating the analysis and completing the project; however, the HRPDC will provide critical logistic and data access support for the analysis. The RSI will appoint and compensate the faculty, graduate students and staff at ODU responsible for the analysis and will be responsible for all expenses involved in producing its final report. The RSI will work with the staff of the HRPDC to identify the sample of geographic areas within Hampton Roads to be analyzed in the project.

The HRPDC will work with its members to provide the RSI with necessary data, including: (1) the location and assessed value of assets and property within the sample of strategic areas selected for analysis; (2) employment and economic activity numbers within the sample of strategic areas; and, (3) GIS, GPS, LIDAR, storm surge and flood mapping that may be available for the sample of strategic areas.

The Director of the RSI, James V. Koch, agrees to keep appropriate HRPDC personnel informed of the progress of the RSI's work, problems that may arise, and preliminary results as they are generated.

**Time Frame:** The RSI will strive to complete its work and make available a draft report to the HRPDC within 90 days after it has received necessary data for any sample area. It is possible that some localities will produce more and better data than others and that some data will not be available in a timely fashion. This may mean that the analysis will be

completed for some of the strategic areas before others, or that eventually some strategic areas cannot be included in the analysis, or that the analysis for some areas will not be completed within the 90-day window. Ideally, however, most or all of the critical data will appear at the same time and the 90-day time frame will apply to the entire analysis.

**Ownership and Sharing of Results:** The RSI and the HRPDC will jointly own the data produced by the analysis and any preliminary or final reports of the project. Any reports, preliminary or final, will be issued under the imprimatur of both organizations; however, no reports will be issued unless both parties agree to such. Any press and media releases similarly must be agreed upon by both parties. The RSI may utilize the data from the project in legitimate scholarly publications with the consent of the HRPDC.

**Funding:** The agreed upon budget for the project is \$110,000 and the two parties will split this cost 50/50. Prospectively, the RSI's costs will consist primarily of payments to personnel (faculty, graduate students, staff), including members of the Old Dominion University Economic Forecasting Project. The RSI will be responsible for making such payments---including salaries, fringe benefits and overhead costs---plus report production costs, and must pay all of these costs up front. The HRPDC agrees to pay to the RSI one-half of its share of the cost of the project (one-half = \$27,500) when both parties agree the project is approximately one-half completed. The RSI will invoice the HRPDC at that point to trigger payment. The remaining one-half (\$27,500) will be paid by the HRPDC to the RSI when the project is completed to the satisfaction of both parties and after the RSI submits an appropriate invoice. The RSI may elect to direct some or all of these funds into its established account in the Old Dominion University Educational Foundation.

**Final Report:** The RSI will compile and pay for its final report to the HRPDC. With the agreement of the RSI, the HRPDC may elect to reorganize and supplement the material into a form suitable for a wider distribution by the HRPDC at its expense.

**Non-Discrimination:** It is the policy of both ODU and the HRPDC to provide equal employment and educational opportunities for all persons, regardless of their race, color, religion, national origin, gender, age, veteran status, political affiliation or sexual orientation or otherwise qualified persons with disabilities.