



# INTER-OFFICE MEMO

---

**DATE:** March 14, 2023

**TO:** Kirk DeJesus, Port Director

**FROM:** Davin Garcia, IT Manager

**CC:** Katie Miller, Deputy Port Director of Administration

**SUBJECT:** GIS Upgrade Request

---

## **OVERVIEW**

The Port of Stockton (Port) has been using Geographic Information Systems (GIS) since 2012. Originally developed and deployed via an agreement with North South GIS (NSGIS), a consulting firm specializing in port geospatial data management, to support Port of Stockton security functions and has grown in use to support other functions such as Port real estate, maintenance, real estate, risk management, and environmental management.

The Port uses ESRI software as the base infrastructure to house our spatial data. The Port's GIS staff use ESRI products to manage and maintain the Port's geospatial data and handle advanced map and data analysis requests. The Port has used NSGIS products and services to create a web map viewer the Port calls the "GeoPORTal" which is available to Port staff. The geoPORTal allows staff to view and create maps and spatial data and perform tasks such as measuring, markups, and linking documents to map items.

The last update of the Port's GIS infrastructure and the geoportal associated software was performed in August of 2018. The Port's current ArcGIS 10.6.1 software entered Mature Support this year and will be unsupported by ESRI in one year. In order for this software to continue to grow with the Port's needs, an upgrade is now needed.

The Port has continuously used NSGIS software since implementation, and has utilized NSGIS expertise for upgrades and GIS consulting purposes. NSGIS has performed all past GIS upgrades and has unique and specific knowledge of Port IT infrastructure, Port staff and the Port's GIS infrastructure. For these reasons, it is highly advantageous for the Port to continue working with NSGIS with the needed upgrade.

## **UPGRADE PROJECT DETAIL**

| <b>#</b> | <b>Vendor</b> | <b>Description</b>                             | <b>Category</b>     | <b>Cost</b> |
|----------|---------------|--|---------------------|-------------|
| 1        | NSGIS         | Upgrade ArcGIS Server to ArcGIS Enterprise     | Services            | \$43,000    |
| 2        | NSGIS         | Upgrade Geocortex, Enesgy Documents, geoportal | Services            | \$32,000    |
| 3        | NSGIS         | Enesgy Subscription Software                   | Software & Licenses | \$16,100    |
| 4        | ESRI          | Staging Server License, User licenses          | Software & Licenses | \$12,900    |
|          |               | Project Total:                                 |                     | \$104,000   |

1. Not to exceed \$43,000 - NSGIS to perform the services of upgrading the Port's underlying GIS infrastructure. NSGIS will perform the work of upgrading from ESRI's ArcGIS Server 10.6.1 to ArcGIS Enterprise 10.9.1 with ArcGIS Portal. This base upgrade will make it possible to then upgrade the GeoPORTal.
2. Not to exceed \$32,000 - NSGIS to work with Port GIS staff to perform the services of upgrading Geocortex, Enesgy Documents, & the geoPORTal. These three add-on products reside 'on top' of our GIS ESRI infrastructure and allow Port staff to utilize our GIS data and maps in a user-friendly format with useful tools.
3. \$16,100 - software licenses - Enesgy Subscriptions for geoportal and the associated tools of document management, Enesgy Redirector (allows different departments to access different data for security purposes and Enesgy Live (allows a live feed of vessel tracking data). Future annual support and maintenance will be \$16,100.00.
4. \$12,900 - ESRI licensing. Includes \$10,000 for a staging server that will add resiliency to our GIS infrastructure and \$2,900 for licensing for user licenses. Having a staging server is functionality the Port currently does not have and will allow for a more controlled introduction of changes into the production environment, creating a more resilient GIS system. Future annual support and maintenance will be \$2,900.00

## **BENEFIT TO THE PORT**

1. Ensures the Port's past investment in GIS is maintained. Without the upgrade, the Port will eventually find itself with unsupported software (the Port's current ArcGIS 10.6.1 software entered Mature Support this year and will be unsupported by ESRI in one year.) Keeping up with the latest versions will enable the Port to take advantage of the latest functionality (like ArcGIS Dashboards and Field Maps apps), security and support offered by ESRI.

2. This upgrade will position the Port to upgrade other systems that reside on top of the ESRI foundation, like Geocortex and Enesgy (together make up geoPORTal), and add new capabilities like connectivity to DocFinity, the Port's new records management software, and potentially lease management, asset management, and/or maintenance work order systems in the future.

### **PROJECT COMPLETION TIME**

The upgrade project is expected to be completed by July 1, 2023.

### **FINANCING**

Operating Expense approved in the 2022-2023 fiscal budget.

### **STAFF RECOMMENDATION**

Authorize the Port Director to:

1. Sign an agreement with North South GIS (NSGIS) to upgrade ArcGIS Server to ArcGIS Enterprise (\$43,000), and upgrade Geocortex, Enesgy Documents, and geoPORTal (\$32,000) for a total cost not to exceed \$75,000.
2. Purchase Enesgy Subscription Software for a total cost of \$16,100.
3. Purchase an ESRI Staging Server License and user license for a total cost of \$12,900.