



STATE OF UTAH COOPERATIVE CONTRACT AMENDMENT

AMENDMENT No.: 4

CONTRACT No.: NASPO #AR2482

Starting Date: 09/30/2016

Expiration Date: 09/15/2026

TO BE ATTACHED AND MADE PART OF the specified contract by and between the State of Utah Division of Purchasing and Environmental Systems Research Institute, Inc. ("ESRI"), (Referred to as CONTRACTOR).

BOTH PARTIES AGREE TO AMEND THE CONTRACT AS FOLLOWS:

The NASPO Master Agreement AR2482 Attachment C (Cost Schedule) is hereby amended to include the updated version, which is attached and incorporated by this reference. Upon the effective date of this Amendment, the updated Attachment C (Cost Schedule) shall supersede and replace previous versions.

Effective Date of Amendment: As of the last signature date below.

All other terms and conditions of the contract, including those previously modified, shall remain in full force and effect. IN WITNESS WHEREOF, the parties sign and cause this contract to be executed.

CONTRACTOR

William C. Fleming
William C. Fleming (Dec 5, 2019)

Dec 5, 2019

Contractor's Signature Date

William C. Fleming

Contractor's Name (Print)

Director of Contracts & Legal

Title (Print)

STATE OF UTAH

Dec 5, 2019

Director Date
State of Utah Division of Purchasing

Purchasing Agent	Phone #	e-mail	Contract #
Solomon Kingston	801-538-3228	skingston@utah.gov	AR2482

Attachment C – Cost Schedule

NASPO ValuePoint Cloud Solutions

Descriptions

Value-Added Services

Time-and-Materials Professional Consulting Services

Labor Categories
Technical Analyst
Technical Consultant I
Technical Consultant II
Technical Consultant III
Deployment Technician
Support Specialist

The pricing sheet will include hourly labor rates for both offsite and onsite consulting support services for each labor category. The hourly labor rates for services may be escalated in an amount not to exceed five percent (5%) each calendar year.

Infrastructure as a Service (IaaS)

1. Product Offers

A. Self-Service Cloud Environments

For Purchasing Entities interested in deploying GIS in the cloud on their own, Esri offers Self-Service Cloud Environments. By subscribing to a Self-Service Cloud Environment, Purchasing Entities have the ability to self-provision infrastructure resources on-demand. Self-Service Cloud Environments serve as the gateway for cloud-enabled GIS, giving Purchasing Entities access to administration tools which allow for self-provisioning of cloud application(s), servers to support GIS and database needs, as well as storage capacity. Purchasing Entity resources will have the ability to select from a variety of cloud infrastructure providers and can select their operating systems, database management systems, and Esri ArcGIS technologies of choice. Purchasing Entity's representatives are responsible for provisioning new servers, storage, databases, and any other infrastructure required as well as deploying and managing software. The representatives may choose to set up remote access to provisioned servers and are therefore free to deploy and modify databases on demand. Upon task order award, Esri will engage with the infrastructure partner ("Infrastructure Host") selected by the Purchasing Entity to activate a dedicated cloud self-service account for the Purchasing Entity. If the Infrastructure host is Amazon Web Services, the Purchasing entity must choose an Amazon Web Service support tier at time of purchase. Esri will also train one identified individual within a Purchasing Entity for up to four hours on the cloud administration tools.

Once an Environment is provisioned, the Purchasing Entity has the ability to load data, publish web services, deploy web applications and take advantage of other cloud administration tools, such as elastic load balancing and auto-scaling. It is the Purchasing Entity's responsibility to provision, administer and manage the Environment in accordance with their desired security and operational standards. There is no Service Level Agreement associated with data, services, or applications hosted with Self-Service Cloud Environments. Organizations can use existing ArcGIS Enterprise licenses or choose from convenient, renewable, Advanced or Standard annual term licensing. Additional terms apply to use Esri Software.

ArcGIS Enterprise Term Licenses
ArcGIS Enterprise Advanced (up to 4 Cores) Annual Term License
ArcGIS Enterprise Standard (up to 4 Cores) Annual Term License

For Esri ArcGIS - Separate terms govern this offering. Esri License Agreement (E204CW); Click to agree at time of software installation: <http://www.esri.com/legal/software-license>

For Amazon Web Services – Current license and pricing can be found at <http://aws.amazon.com/>. If ordering services through Amazon Web Services, the Purchasing Entity must choose an Amazon Web Services support tier at time of purchase (excludes Mechanical Turk, Amazon Dev Pay and Flexible Payment Services).

For Microsoft Azure – Current license pricing can be found at <https://azure.microsoft.com/en-us/>. If ordering services through Microsoft Azure, the Purchasing Entity must choose an Azure Support for Customers plan at time of purchase. Esri reserves the right to change pricing for Self-provision cloud services at any time to the extent required to offset pricing changes from the Infrastructure host.

IAAS provided under AWS and Microsoft Azure is provided exclusively under the terms of use set forth by the Infrastructure host. Purchasing Entities access to and continued use of the IAAS Services above is conditioned upon compliance with all laws, rules, and regulations (b) compliance and agreement with the policies and procedures under which the IAAS is made available by the Infrastructure host in general and 3) conformance with Esri training provided for the use of the cloud administration tools. Esri reserves the right to update these terms and conditions at any time as promulgated by the Infrastructure Host. The Purchasing Entity agrees to comply with all Infrastructure Host terms and conditions of use.

ESRI DOES NOT WARRANT OR ASSUME ANY LIABILITY FOR THE PERFORMANCE OR OPERATION OF THE IAAS INFRASTRUCTURE HOST AND IS NOT RESPONSIBLE FOR ANY CLAIMS ARISING OUT OF THE USE OF THE SELF-SERVICE CLOUD HOSTING.

2. Value-Added Services

A. Advice Services

System Architecture and Design

Designed for Purchasing Entities building new or migrating existing GIS to the cloud, the System Architecture and Design offer will equip Purchasing Entities with the information required to plan a cloud environment to support their needs. Whether considering a range of market leading cloud infrastructure providers (Amazon AWS, Microsoft Azure) or debating a hybrid strategy of on premises and cloud, an Esri consultant will lead on-site activities to assess requirements, lead discussions, and evaluate cloud design alternatives. The purpose of the engagement is to determine an appropriate cloud GIS architecture for the business drivers and technical requirements identified during this activity. As a result of these activities Purchasing Entities will receive cloud configuration recommendations in a Cloud System Architecture and Design document.

Cloud Capacity Planning

This service provides cloud environment and capacity recommendations for Esri products. These recommendations are based on Esri best practices and the Purchasing Entity's profile and requirements. A three-page summary of recommendations is provided.

B. Enablement Services

ArcGIS for Server Jumpstart for Amazon Web Services

With ArcGIS for Server on Amazon Web Services (AWS), you harness the power of the cloud while maintaining full control over your environment. The ArcGIS for Server Jumpstart for Amazon Web Services enables organizations to get started with ArcGIS for Server. This service provides configuration support, technology transfer on standard topics and best practices to provide a smooth transition to AWS.

ArcGIS for Server Jumpstart for Microsoft Azure

With ArcGIS for Server on Microsoft Azure, you harness the power of the cloud while maintaining full control over your environment. The ArcGIS for Server Jumpstart for Microsoft Azure enables organizations to get started with ArcGIS for Server. This service provides configuration support, technology transfer on standard topics and best practices to provide a smooth transition to Azure.

WebGIS Jumpstart

The WebGIS Jumpstart gives a Purchasing Entity an introduction to the capabilities of WebGIS and demonstrates how to leverage it as part of the ArcGIS platform. Organizations will learn how to configure their cloud environment using ArcGIS Online or Portal for ArcGIS and how the cloud plays a central role in this emerging pattern.

Performance and Scalability Testing

With a Performance and Scalability package, Purchasing Entities will be able to know if their cloud environment will scale as planned with confidence. During this engagement, Esri will implement a test plan, validate the planned cloud environment, run a standard battery of testing scripts, and test

execution to measure how workflows perform and how your cloud environment scales under load. Results of these tests will be summarized in a document at the completion of testing.

C. Migration Services

Map, data, or application migration services

A Purchasing Entity can get support from an Esri consultant to migrate a physical or virtual GIS environment to a cloud-based environment. Cloud migration typically involves the migration of data, services, and application(s) and the Esri consultant can help with any of these activities. During the engagement, the Esri consultant will employ an “I do, we do, you do” approach, initially doing, then working side-by-side with Purchasing Entity resources and concluding by ensuring that the Purchasing Entity’s resources are able to perform on their own.

D. Use Services

Cloud-based GIS Health Check

This proactive activity is designed to provide early detection of potential issues by reviewing a Purchasing Entity’s cloud environment. After walking through a standard set of evaluation tools with an Esri consultant, organizations will understand how their GIS systems compare to Esri best practices, where improvements can be made, and receive recommendations based on the findings.

Cloud GIS Performance Assessment

Unsure what is causing slow performance in your cloud environment? Are your cloud costs growing faster than expected? This service will investigate cloud GIS system performance, including bottleneck detection and service bloat. During this engagement, an Esri expert will collect performance metrics, identify problems with system configuration and architecture, and discuss components that impact performance. Tools and methodologies will be used to isolate and diagnose performance issues. A report with findings and recommendations is provided following the on-site visit.

Performance Tuning

Note: This offer is only available in conjunction with the purchase of a Cloud Performance Assessment.

Is a specific GIS operation experiencing slow performance? This service will focus on addressing the performance pain points already identified in the Cloud GIS Performance Assessment. Esri resources will examine operation workload, application configuration, and the operating environment. Tools and methodologies will be utilized to trace and measure the effects of parameter changes and optimization.

Software as a Service (SaaS)

1. Product Offers

A. ArcGIS Online

Esri's secure, multitenant cloud that's scalable and ready to use. No additional hardware or software has to be purchased or installed. ArcGIS Online gives users in a Purchasing Entity's organization access to tools, basemaps, and other content to make and share maps and applications. Users can catalog and discover maps and applications; set up groups to collaborate; and share items with each other, the entire organization, or publicly. For example, without any programming, any user that's part of an ArcGIS Online organizational account can quickly share maps by embedding them in a website or blog, through social media, or by using preconfigured web application templates.

For ArcGIS Online.

Separate terms govern this offering. License Agreement (E204CW);

Click to agree at time of software installation: <http://www.esri.com/legal/software-license>

2. Value-Added Services

B. Advice Services

System Architecture and Design

Designed for Purchasing Entities building new or migrating existing GIS to the cloud, the System Architecture and Design offer will equip Purchasing Entities with the information required to plan a cloud environment to support their needs. Whether considering a range of market leading cloud infrastructure providers (Amazon AWS, Microsoft Azure, IBM SoftLayer) or debating a hybrid strategy of on premises and cloud, an Esri consultant will lead on-site activities to assess requirements, lead discussions, and evaluate cloud design alternatives. The purpose of the engagement is to determine an appropriate cloud GIS architecture for the business drivers and technical requirements identified during this activity. As a result of these activities Purchasing Entities will receive cloud configuration recommendations in a Cloud System Architecture and Design document.

C. Enablement Services

WebGIS Jumpstart

The WebGIS Jumpstart gives a Purchasing Entity an introduction to the capabilities of WebGIS and demonstrates how to leverage it as part of the ArcGIS platform. This service is ideal for organizations looking to embrace the WebGIS pattern. This is accomplished with assistance from an Esri consultant who will help Purchasing Entity resources configure their WebGIS using an ArcGIS Online or Portal for ArcGIS. They may also review how to populate a Purchasing Entity's account with organizational content, and help resources learn best practices on how to use, publish, and administer content and services with WebGIS.

D. Migration Services

Map, data, or application migration services

A Purchasing Entity can get support from an Esri consultant to migrate a physical or virtual GIS environment to a cloud-based environment. Cloud migration typically involves the migration of data, services, and application(s) and the Esri consultant can help with any of these activities. During the engagement, the Esri consultant will employ an “I do, we do, you do” approach, initially doing, then working side-by-side with Purchasing Entity resources and concluding by ensuring that the Purchasing Entity’s resources are able to perform on their own.

E. Use Services

Cloud-based GIS Health Check

This proactive activity is designed to provide early detection of potential issues by reviewing a Purchasing Entity’s cloud environment. After walking through a standard set of evaluation tools with an Esri consultant, organizations will understand how their GIS systems compare to Esri best practices, where improvements can be made, and receive recommendations based on the findings.

Platform as a Service (PaaS)

1. Deployment Patterns

A. Managed Cloud Services Deployment Patterns

Purchasing Entities have the ability to procure the ArcGIS platform through the Esri Managed Cloud Services team. Esri’s Managed Cloud Services are designed to grant Purchasing Entities access to all of the features of ArcGIS for Server including Portal while removing the responsibilities normally associated with administering the Platform. By purchasing Managed Cloud Services, Purchasing Entities gain access to Esri’s cloud *and* GIS expertise. This partnership allows a Purchasing Entity’s resources the freedom to focus on delivering location value with the confidence that Esri will deliver a system to support its strategic and operational goals.

Deployment Pattern	Managed Cloud Services Descriptions
Content Service	This is targeted at GIS organizations looking at the hosting and publication of their GIS content as a service in the cloud. Purchasing entities looking at the Content Service Deployment Pattern Package will have the ability to store and publish data such as vector maps and associated attribute data, while applying a modern WebGIS pattern with secure and reliable web services that support applications and access points. The Content Service Deployment Pattern Package will be supplemented with another Esri Value-Added Service Package, and/or Time-and-Materials consulting services labor hours, depending on the needs of the engagement.

Custom*	If the Content Service Deployment Pattern Package listed above does not meet a Purchasing Entity's requirements, Esri can configure and host an environment to suit its size, performance, and security needs (including FedRAMP Moderate). Customers may need additional Value-Added Service Packages, and/or Time-and-Materials consulting labor hours depending on the specifications of the engagement for Custom Managed Services proposals. *For help with custom proposals, please contact the Esri Managed Cloud Services team at ManagedCloudServices@esri.com or NASPO-AR2482-Admin@esri.com
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2. Value-Added Services

A. Advice Services

System Architecture and Design

Designed for Purchasing Entities building new or migrating existing GIS to the cloud, the System Architecture and Design offer will equip Purchasing Entities with the information required to plan a cloud environment to support their needs. Whether considering a range of market leading cloud infrastructure providers (Amazon AWS, Microsoft Azure) or debating a hybrid strategy of on premises and cloud, an Esri consultant will lead on-site activities to assess requirements, lead discussions, and evaluate cloud design alternatives. The purpose of the engagement is to determine an appropriate cloud GIS architecture for the business drivers and technical requirements identified during this activity. As a result of these activities Purchasing Entities will receive cloud configuration recommendations in a Cloud System Architecture and Design document.

A. Enablement Services

ArcGIS for Server Jumpstart for the Cloud

With ArcGIS for Server deployed in the cloud, you not only have access to the power of the cloud but also have full control over your environment. The ArcGIS for Server Jumpstart for the Cloud enables organizations to get started with ArcGIS for Server. This service provides configuration support, technology transfer on standard topics and best practices to provide a smooth transition to the cloud.

WebGIS Jumpstart

The WebGIS Jumpstart gives a Purchasing Entity an introduction to the capabilities of WebGIS and demonstrates how to leverage it as part of the ArcGIS platform. This service is ideal for organizations looking to embrace the WebGIS pattern. This is accomplished with assistance from an Esri consultant who will help Purchasing Entity resources configure their WebGIS using an ArcGIS Online or Portal for ArcGIS. They may also review how to populate a Purchasing Entity's account with organizational content, and help resources learn best practices on how to use, publish, and administer content and services with WebGIS.

Proof of Concept

Purchasing Entities looking to migrate to the cloud may not always feel confident in how a cloud-based environment will work for their organization. The Proof of Concept is designed to equip organizations with the experiences and information they need to confidently make a cloud migration decision and plan. Esri consultants will work with the Purchasing Entity resources to establish baselines for key performance metrics. The Proof of Concept will take place over three phases: Discovery, Experience, and Reporting. During the Discovery phase, an Esri consultant will work to establish will explain key cloud KPIs and establish baseline measurements for the Purchasing Entity. While in the Experience phase, the Purchasing Entity will have access to an ArcGIS system which Esri will set- up, configure, and deploy in the cloud. Throughout the Proof of Concept, Esri will help the Purchasing Entity continue to measure the key performance metrics. At the end, the Purchasing will receive a report of how the system performed against the KPIs and how those compared to the baseline measurements.

90-day engagement. Term licensing may be added. Quotes for custom Proofs of Concept can be provided upon request.

B. Migration Services

Map, data, or application migration services

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C. Use Services

Cloud-based GIS Health Check

This proactive activity is designed to provide early detection of potential issues by reviewing a Purchasing Entity’s cloud environment. After walking through a standard set of evaluation tools with an Esri consultant, organizations will understand how their GIS systems compare to Esri best practices, where improvements can be made, and receive recommendations based on the findings.

Cloud GIS Performance Assessment

Unsure what is causing slow performance in your cloud environment? Are your cloud costs growing faster than expected? This service will investigate cloud GIS system performance, including bottleneck detection and service bloat. During this engagement, an Esri expert will collect performance metrics, identify problems with system configuration and architecture, and discuss components that impact performance. Tools and methodologies will be used to isolate and diagnose performance issues. A report with findings and recommendations is provided following the on-site visit.

Performance Tuning

Note: This offer is only available in conjunction with the purchase of a Cloud Performance Assessment.

Is a specific GIS operation experiencing slow performance? This service will focus on addressing the performance pain points already identified in the Cloud GIS Performance Assessment. Esri resources will examine operation workload, application configuration, and the operating environment. Tools and methodologies will be utilized to trace and measure the effects of parameter changes and optimization.

Attachment C - Cost Schedule
NASPO ValuePoint Cloud Solutions #AR2482

Discount Percent (%) Offered:

Infrastructure as a Service (IaaS)	Discount - 1%
Software as a Service (SaaS)	Discount - 1%
Platform as a Service (PaaS)	Discount - 2%
Value-Added Services	Discount - 2%

All pricing is subject to annual escalation. The Master Agreement pricing will be adjusted for each Participating Addendum, as needed to support State Administrative Fees, as provided in Attachment A, Section 27.

Value-Added Services

A. Time-and-Materials (T&M) Professional Consulting Services Hourly Labor Rates

Labor Categories	2019 Offsite	2019 Onsite	2020 Offsite	2020 Onsite
Technical Analyst	\$242	\$297	\$250	\$307
Technical Consultant I	\$278	\$333	\$288	\$345
Technical Consultant II	\$304	\$359	\$315	\$372
Technical Consultant III	\$377	\$432	\$390	\$447
Deployment Technician	\$204	\$258	\$211	\$267
Support Specialist	\$155	\$210	\$160	\$217

T&M hourly labor rates have been provided for each labor category for calendar years 2019 and 2020. The hourly labor rates for consulting services that are performed after 2020 may be escalated in an amount not to exceed five percent (5%) each year.

Infrastructure as a Service (IaaS)

I. Product Offers

A. Self-Service Cloud Environments - Term Pricing

ArcGIS Enterprise Term Licenses	2019/2020 Price
ArcGIS Enterprise Advanced (up to 4 Cores) Annual Term License	\$24,300
ArcGIS Enterprise Standard (up to 4 Cores) Annual Term License	\$12,150

For Esri ArcGIS Software Products - Separate terms govern this offering. Esri License Agreement (E204CW); Click to agree at time of software installation:

<https://www.esri.com/legal/software-license/>

For Amazon Web Services – If ordering services through Amazon Web Services, the Purchasing Entity must choose an Amazon Web Services support tier at time of purchase (excludes Mechanical Turk, Amazon Dev Pay and Flexible Payment Services). Current license and pricing can be found at:

<http://aws.amazon.com/>

For Microsoft Azure - If ordering services through Microsoft Azure, the Purchasing Entity must choose an Azure Support for Customers plan at time of purchase. Esri reserves the right to change pricing for Self-provision cloud services at any time to the extent required to offset pricing changes from the Infrastructure host. Current license and pricing can be found at:

<https://azure.microsoft.com/en-us/>

II. Value-Added Services

A. Advice Services - Package Pricing

Item	2019 Price	2020 Price
System Architecture & Design - 3 Day	\$32,000	\$33,100
System Architecture & Design - 4 Day	\$35,500	\$36,700
System Architecture & Design - 5 Day	\$45,900	\$47,500
Cloud Capacity Planning	\$2,680	\$2,770
ArcGIS for Server Jumpstart for Amazon Web Services (3 day)	\$11,700	\$12,100
ArcGIS for Server Jumpstart for Amazon Web Services (4 day)	\$14,300	\$14,800
ArcGIS for Server Jumpstart for Microsoft Azure (3 day)	\$11,700	\$12,100
ArcGIS for Server Jumpstart for Microsoft Azure (4 day)	\$14,300	\$14,800
WebGIS Jumpstart (3 day)	\$11,700	\$12,100
WebGIS Jumpstart (4 day)	\$14,300	\$14,800
Performance & Scalability Testing	\$26,700	\$27,600
Map, Data, or Application Migration Services (Advanced)	\$26,700	\$27,600
Cloud-based GIS Health Check	\$14,700	\$15,200
Cloud GIS Performance Assessment	\$26,700	\$27,600
Performance Tuning	\$14,700	\$15,200

Software as a Service (SaaS)

I. Product Offers

ArcGIS Online User Type - Term License Prices	2019/2020 Price
ArcGIS Online Viewer - Annual Term License	\$100
ArcGIS Online Creator - Annual Term License	\$501
ArcGIS Online Additional Service Credits - Block of 1,000	\$100

For Esri ArcGIS Online - Separate terms govern this offering. Esri License Agreement (E204CW); Click to agree at time of software installation:

<https://www.esri.com/legal/software-license/>

II. Value-Added Services

A. Advice Services - Package Pricing

Item	2019 Price	2020 Price
System Architecture & Design - 3 Day	\$32,000	\$33,100
System Architecture & Design - 4 Day	\$35,500	\$36,700
System Architecture & Design - 5 Day	\$45,900	\$47,500
WebGIS Jumpstart (3 day)	\$11,700	\$12,100
WebGIS Jumpstart (4 day)	\$14,300	\$14,800
Map, Data, or Application Migration Services (Advanced)	\$26,700	\$27,600
Cloud-based GIS Health Check	\$14,700	\$15,200

Platform as a Service (PaaS)

I. Product Offers

A. Managed Cloud Services Deployment Patterns

Deployment Patterns	Configuration	2019/2020 Annual Starting Price
Content Service	Standard	\$97,200 Price for additional Service Packages and/or Time-and-Materials consulting services labor hours may be added to the above starting price, depending on the needs of the engagement.
Custom*	Custom	Custom Pricing

* For help with custom proposals, please contact the Esri Managed Cloud Services team at: ManagedCloudServices@esri.com or NASPO-AR2482-Admin@esri.com

II. Value-Added Services

A. Advice Services - Package Pricing

Item	2019 Price	2020 Price
System Architecture & Design - 3 Day	\$32,000	\$33,100
System Architecture & Design - 4 Day	\$35,500	\$36,700
System Architecture & Design - 5 Day	\$45,900	\$47,500
ArcGIS for Server Jumpstart for the Cloud (3 day)	\$11,700	\$12,100
ArcGIS for Server Jumpstart for the Cloud (4 day)	\$14,300	\$14,800
WebGIS Jumpstart (3 day)	\$11,700	\$12,100
WebGIS Jumpstart (4 day)	\$14,300	\$14,800
Proof of Concept	\$34,600	\$35,800
Map, Data, or Application Migration Services (Advanced)	\$26,700	\$27,600
Cloud-based GIS Health Check	\$14,700	\$15,200
Cloud GIS Performance Assessment	\$26,700	\$27,600
Performance Tuning	\$14,700	\$15,200