<u>ATTACHMENT E</u> <u>Historical Resource Load Information</u>

CLIN 00001 Client Delivery

This table is for historical purposes only.

Site	Incumbent Position Title	FTEs
Pittsburgh, PA	Service Center Manager	1
Pittsburgh, PA	Helpdesk Specialist Int I	1
Pittsburgh, PA	Helpdesk Specialist Int II	2
Morgantown, WV	Desktop Technician Int I	1.5
Pittsburgh, PA	Desktop Technician Int I	1.5
Albany, OR	Desktop Technician Int I	1
Morgantown, WV	Video Telecom Technician	1
Pittsburgh, PA	Video Telecom Technician	1
Albany, OR	Video Telecom Technician	1
Morgantown, WV	Wireless Technician Int II	1
Pittsburgh, PA	Wireless Technician Int II	1
Morgantown, WV	Research System Administrator I	1
Morgantown, WV	Research System Administrator II	2

CLIN 00002 Infrastructure

This table is for historical purposes only.

Site	Incumbent Position Title	FTEs
Pittsburgh, PA	Manager (Infrastructure)	1
Morgantown, WV	Research Chief Architect	1
Pittsburgh, PA	System Administrator Sr	1
Morgantown, WV	System Administrator Sr	2
Morgantown, WV	Research System Administrator Sr	1
Pittsburgh, PA	System Administrator Int II	2
Morgantown, WV	System Administrator Int II	1
Albany, OR	System Administrator Int II	1
Pittsburgh, PA	Client Systems Engineer Sr	1
Morgantown, WV	Client Systems Engineer Sr	2
Pittsburgh, PA	Client Systems Engineer Int II	1
Morgantown, WV	Client Systems Engineer Int II	1
Pittsburgh, PA / Morgantown, WV	Research Client Systems Engineer Int II	1.5
Pittsburgh, PA / Morgantown, WV	Research Client Systems Engineer Sr	1

Pittsburgh, PA	Network Engineer I	1
Morgantown, WV	Network Engineer II	1
Albany, OR	Network Engineer II	2
Morgantown, WV	Network Engineer Sr	2.5
Pittsburgh, PA	Network Engineer Sr	2
Pittsburgh, PA	Telecom Technician Int I	1
Morgantown, WV	Video Telecom Technician Int	1
Pittsburgh, PA	Video Telecom Technician Int	1
Albany, OR	Video Telecom Technician Int	1

CLIN 00003 Applications

Historically, the Enterprise Applications O&M effort consisted of 15 full time resources spread across the tasks defined. Resources were in both Pittsburgh and Morgantown. Specific skillsets included: Software Developers/Engineers, SharePoint Admins/Developers, Platform/App Administrators, Database Administrators, SharePoint Administrators, a Business Analyst, and an IT Project Manager/Scrum Master. Of the skill sets required, varying levels of expertise from Entry-level to Senior-levels have been utilized. Platforms include an Oracle database management system, SQL Server database management systems, ServiceNow, SharePoint, Atlassian JIRA, Cognos Analytics, and Salesforce Tableau. ServiceNow Platform administration was not historically performed within this group but should be considered within this activity's platform administration scope.

The work performed consisted of maintaining an application portfolio of approximately 80 business systems of varying size and complexity for which approximately 30 were maintained/updated or supported under the scope of enterprise applications. The team was responsible for deployments of nearly all solution providers deploying into the NETL production environment. On average, the team deployed 2-3 releases per week. The team was responsible for ensuring application availability following any change to the technical environment and therefore conducts "return to service testing" on average 6 times per month. The team was responsible for database, application, middleware, and runtime upgrades and patching. Historically, the team worked on an average of 4 initiatives in parallel (application modification, upgrade), while deploying on average 2 third-party releases into production per week and responding to an average of 8 Tier 3 service desk calls per week.

Site	Incumbent Position Title	FTEs
Morgantown, WV	Ent. Apps Lead	1
Morgantown, WV	Software Engineer Sr	3
Morgantown, WV	Software Engineer Int I/II	2
Morgantown, WV	SharePoint Online Admin Int II	1
Morgantown, WV	SharePoint Online Admin Int II	1
Pittsburgh, PA	SQL Database Admin Int II	1
Pittsburgh, PA	SQL Database Admin Sr	1
Pittsburgh, PA	Oracle DBA Int II	1

Pittsburgh, PA	Oracle DBA Sr	1
Pittsburgh, PA	SharePoint Online Admin Int II	1
Pittsburgh, PA	Business Analyst Int	1
Pittsburgh, PA	Business Analyst Sr	1

CLIN 00004 Cybersecurity

The following table contains the historical resources used by the incumbent contractor supporting this activity. These are the job titles for the approximately 10 FTEs that have historically been used.

Site	Incumbent Position Title	FTEs
Morgantown, WV / Pittsburgh, PA	Cybersecurity Manager	1
Morgantown, WV / Pittsburgh, PA	Information Assurance Analyst Int I	2
Morgantown, WV / Pittsburgh, PA	Information Assurance Analyst Sr	1
Morgantown, WV / Pittsburgh, PA	Cybersecurity Engineer Int II	2
Morgantown, WV / Pittsburgh, PA	Cybersecurity Operations Analyst Sr	2
Morgantown, WV / Pittsburgh, PA	Cybersecurity Operations Analyst Int	2

CLIN 00005 Research

Activity 00005a High Performance Computing (HPC)

Historically the HPC activity consisted of average of 7.5 FTEs – Joule 5.167 FTEs and Watt 2.333 FTEs, except contract governance overhead. Specific skill sets included: Scientific and Engineering knowledge; Supercomputing knowledge; OpenStack Cloud knowledge; Linux/Windows OS experience, Software Development, Data Management & Analytics, and Project Management. HPC is a critical element of NETL's mission, and it is expected that highly skilled individuals with a background in HPC Cluster/Cloud support shall be provided. Historically, the work performed consisted of maintaining a HPC environment for a wide variety of research projects through the HPC systems including Joule supercomputer and Watt AI/ML cluster/cloud. In addition to 7.5 FTEs above, 2 FTEs (System Administrators) were added in April 2022 for the HPC support during Joule 2.0 lease extension period plus one year. And Information Security Engineer will be newly added into all CLIN 3 activities.

Site	Position Title	FTEs
Morgantown, WV	Manager (HPC)	0.5
Morgantown, WV	Chief Architect (HPC)	0.5
Morgantown, WV	Network Engineer	0.333

Morgantown, WV	Team Lead (HPC-Joule)	0.5
Morgantown, WV	Team Lead (HPC-Watt)	0.5
Morgantown, WV	AI/ML Scientist-Sr	1
Morgantown, WV	System Administrator III (HPC)	2
Morgantown, WV	System Administrator II (HPC)	2
Morgantown, WV	System Administrator I (HPC)	1
Pittsburgh, PA	System Administrator I (HPC)	1
Pittsburgh, PA	System Administrator II (HPC)	0.333
Morgantown, WV	Information Security Engineer	0.5

Activity 00005b Energy Data Exchange (EDX)

Historically, this activity has taken approximately 10 FTEs, however, this did not include the cloud or cyber support. Since much of the work for EDX is development which does not require a specific location to perform, the location of the work is designated as "n/a" to represent either offsite or non-site specific. This table approximates past support; however, this is a high growth area for NETL.

Site	Position Title	FTE
Morgantown, WV	Manager	0.5
Morgantown, WV	Applications/System Architect	0.25
n/a	Cloud Security Specialist	1
n/a	Subject Matter Expert I	1
n/a	Subject Matter Expert II	1
n/a	System Administrator III	0.5
n/a	Applications Programmer II	4
n/a	Computer Systems Analyst I	1
Morgantown, WV	Computer Systems Analyst III	1