Project Descriptions – Information Technology

	State Funds	Federal Funds	Other LTF	Project Total
Cabinet of the General Government				
Education & Workforce Development Cabinet				
Adult Education System Modernization				
The current system is over 10 years old. It lacks best practices, latest security enhancements and clean data.	1,914,000			1,914,000
ATSC 3.0 Conversion Phase 2, KY Educational Television				
ATSC 3.0 Conversion Phase 2: The KET Network Center and Transmission sites provide a reliable, redundant infrastructure for public safety and communications 24/7/365 (relied upon by NOAA, state police, FBI, and others). To help ensure the safety of Kentuckians, KET's statewide transmitters need to be equipped to distribute regional localized emergency alerts for weather and other disasters. Emergency Alert System receivers and processors are needed for all 16 transmitters to provide critical local emergency alerts for the commonwealth. As Kentucky's only statewide broadcast network, this will also enable KET to serve as the much-needed public safety connector for commercial broadcasters in rural and urban communities across the commonwealth.	1,500,000			1,500,000
Energy & Environment Cabinet				
AR Inspection Forms				
The Energy and Environment Cabinet performs over 50,000 inspections and investigations each year. The goal of this project is to allow these inspections to be documented via a mobile application that will speed the inspection process, increase accuracy, and lessen the dependency on visits to the office. Customized mobile inspection templates will allow inspectors to spend more time protecting human health and the environment while reducing the time spent on documentation and travel. EEC will work with vendors and contractors to customize commercial off the shelf software to create mobile inspection templates that will be interfaced with existing Cabinet databases.	1,785,000			1,785,000
Finance and Administration Cabinet				
Commonwealth Office of Technology				
Kentucky Business OneStop (KyBOS) Phase IV				
The goal of the Phase IV project is to improve and modernize Secretary of State (SOS) IT Applications & Infrastructure. The immediate needs identified are 1) Improve the current interfaces between SOS and One Stop applications – the anticipated benefits are reduction in support call volumes by removing fragile asynchronous calls, providing greater control of end-to-end processes, and making role management and registration easier 2) Develop one version of SOS and One Stop functionality, this may be achieved by combining the backend databases and having a common front end – the benefits are reduction in duplicated functionality in two different system, and combining efforts in providing an overall improved SOS experience 3) Modernize the legacy Integrated Development Environment (IDE) Desktop applications by identifying heavily used functionality that is no longer needed. The benefit is improved Return On Investment on the new technology investment that will reduce overall maintenance and support costs. An initial list of IDE desktop applications has been identified and prioritized.	4,128,000			4,128,000

Kentucky Emergency Warning System (KEWS) Hardware Modernization		
This is the public safety wireless network which provides the communications backbone and infrastructure for	25,226,000	25,226,000
nearly all of the first responders throughout the state. Its primary purpose is to provide a survivable		
communications system that can be used by all first responders and disaster response agencies for		
communications in times of emergencies. The KEWS network consists of 145 sites which are located in remote		
unmanned locations that typically have been in service since 1979. Kentucky State Police (KSP) is KEWS		
largest consumer. With sixteen post locations throughout the Commonwealth, KSP utilizes the KEWS		
microwave for their state radio system that gives them the capability to communicate statewide. KSP currently		
has two Capital Projects to upgrade/replace their public safety radio system. KSP is seeking to replace the		
radios in the existing towers as well as add tower sites and to move from the current radio spectrum into the		
newer 700 MHZ radio spectrum. The current COT KEWS microwave network provides the backbone		
connectivity that the radio system uses statewide. The current network can handle the existing workload, but		
is running on "end of life" equipment. Further, it will not be able to handle the additional bandwidth that will		
be required to support the new radio system. For KEWS to continue to serve the Commonwealth, the		
microwave network, along with other components, will require modernization.		
Dept of Revenue		
Integrated Tax System		
A modern, integrated tax system is critical for the Department of Revenue, to reduce risk and cost and to	8,634,000	8,634,000
provide benefits to both the taxpayer and the employee. It will replace over 116 applications, 84 of which are		
using old and/or unsupported technology.		
Office of the Controller		
eMARS Upgrade & Systems Enhancements		
The Office of the Controller (OOC) is seeking approval to upgrade the Commonwealth's Reporting and	14,000,000	14,000,000
Financial application. We are currently operating version 3.11.1D of the 'Enhanced Management		
Administrative and Reporting System' (eMARS); and are seeking to upgrade the application to 'CGI Advantage		
4'. The eMARS application is used across all branches of government, and has remained relatively unchanged		
in its basic function and processing since the original implementation in 2006. The Office of the Controller has		
performed several smaller upgrades to the application software and back end technology over the years to		
maintain a current supported version of the application. This has been possible by utilizing the existing staff		
and available resources. An upgrade to CGI Advantage 4 will allow OOC to leverage the latest available		
technology. Advantage 4 transforms the user experience in the look and feel of the software navigation, and		
allows for better integration with existing solutions such as OnBase ECM tool. A full integration with an		
Application Development (AD) authentication solution to existing reporting tools (i.e. EBI) would be developed		
to allow users a single logon to multiple applications. The upgrade will provide improved efficiency, enhanced		
reporting and a more user-friendly application for both employees and vendors. The latest version of the		
software will require extensive planning and review of existing customizations to determine their current value		
to the software solution. Funding is being requested to purchase the additional licensing and support needed		
from CGI Advantage to upgrade the current Financial and Reporting solution and integrate additional features		
that will maximize the Commonwealth's administrative application. The requested funding will also be used		

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to obtain the necessary staff to lead the effort of planning, testing, implementation and maintenance of this			
application. Health and Family Services Cabinet			
TWIST Modernization, DCBS			
The Department for Community Based Services (DCBS) currently uses The Workers Information System	9,497,000	9,496,000	18,993,000
(TWIST) in the operation of its adoption and foster care programs. Congress passed The Family First Prevention	9,497,000	9,490,000	10,995,000
Services Act of 2018 (Family First) in February 2018, which took effect in October 2019 and is leading to an			
overhaul of the state's child welfare system. This project will directly affect over 9,600 children that are in Out			
of Home Care, over 9,200 children that have been adopted over the last 10 years, and over 2,000 front line			
social service workers across Kentucky as they relate to Foster/Adoption welfare services.			
SAMS Modernization , Dept of Aging and Independent Living			
	958,000	50,000	1 000 000
Funding will be used for upgrades to the Department for Aging and Independent Living (DAIL) IT technology	958,000	50,000	1,008,000
and application modernizations which are outdated. Application development and software technology			
lifecycles run three to five years. Upgrades and modernization efforts are key to maintaining services to field			
workers and the citizens of the Commonwealth of Kentucky.			
KASES III, Dept of Income Support			
CHFS has a critical need to upgrade the Kentucky Child Support Enforcement System (KASES) through use of	11,220,000	21,780,000	33,000,000
web technology. The Legacy application uses Cobol/Telon and IMS DB technology, which are obsolete,			
resulting in a critical shortage of available skilled resources and significant risk in providing on-going support			
of the system. A modernized system will allow for greater ease of maintenance and will position the			
Commonwealth to implement efficiencies, reduce waste and fraud, and improve data accuracy.			
Justice & Public Safety Cabinet			
Dept of Public Advocacy Case Management System			
DPA provides constitutionally-required representation to indigent Kentuckians charged with crimes. A quality	1,650,000		1,650,000
and comprehensive web-based case management system is needed to replace our existing system due to the			
vendor discontinuing and no longer supporting the current application (Justware). A case management			
system is critical to DPA to effectively serve our clients, the courts and the Commonwealth.			
Kentucky State Police Emergency Radio System Replacement			
Funding to replace existing statewide emergency radio communications network. This system provides day	55,440,000		55,440,000
to day emergency radio communications between KSP dispatch and the Kentucky State Police, Commercial			
Vehicle Enforcement, KY Fish and Wildlife, Attorney General's Office, ABC and other state agencies. This			
project will have a life that extends over a 10 year master agreement. The cost will be divided over this 10			
year period which will ensure maintenance contracts and service upgrades are completed throughout the			
payment period.			
KY Communications Network Authority			
KentuckyWired Equipment Refresh 2022-2024			
This project supports the continued operation of the KentuckyWired network. As with any	7,508,000		7,508,000
telecommunications network, core equipment must be upgraded at appropriate intervals to continue to			
provide the flexibility, bandwidth and performance needed to provide service to the agencies served by the			

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network. This project will spread over 3 biennium periods, and it provides for the replacement of the core				
optical switching, core routing, and edge routing equipment utilized by the KentuckyWired network to provide				
services to agencies located in all 120 counties across the state of Kentucky.				
KentuckyWired Network Enhancements 2022-2024				
This project supports critical enhancements to the KentuckyWired network. As the utilization of the	2,000,000			2,000,000
KentuckyWired grows, there are specific network enhancements that will allow the network to handle the				
increased demand more effectively and efficiently. These enhancements allow the network to increase the				
redundancy and flexibility in key areas of the network to ensure end users receive reliable service. This				
project will spread over 3 biennium periods, and it provides for additional core optical switching, core routing,				
and fiber infrastructure utilized by the KentuckyWired network to provide services to agencies located in all				
120 counties across the state of Kentucky.				
Tourism, Arts and Heritage Cabinet				
Dept of Parks				
Cable Infrastructure Planning and Implementation				
This project will document the location and condition of communications cable (primarily telephone cable and	6,000,000			6,000,000
fiber data cable) and coax cable (TV), both underground and aerial. This project will also document details				
and condition of wiring closets including all communications and TV cable. This project shall create detailed				
planning to include cost estimates required to replace aging cable, and upgrade/restructure wiring closets.				
This project shall include a plan to maintain infrastructure cabling over the coming years. This project will				
impact all resort parks and select larger recreation parks. Current cable infrastructure is in excess of 30 years				
old and has become extremely unreliable. The cable shall be replaced with a data grade cable capable of				
VOIP and high speed transmission.				
Cabinet for Postsecondary Education				
Council on Postsecondary Education				
Student Portal (College to Career Pathways)				
In order to increase the percentage of working age Kentuckians with a postsecondary certificate or degree to	2,000,000			2,000,000
60% by 2030, and facilitate the transition of Kentucky students at all stages (traditional, transfer, military,				
returning adults, and first-time adults) and from diverse backgrounds (including low income students and				
underrepresented minority students), into postsecondary programs, the Council on Postsecondary Education				
seeks to create an online portal with special emphasis on articulating the specific credits, curricular pathways,				
career opportunities, and net costs associated with the certificates, degrees, and institutions relevant to the				
student.				
Upgrade KY Reg Optical Network Infrastructure				
This is a project to fund networking equipment to support the integration of Internet2 applications into the	1,000,000			1,000,000
teaching and learning environment on the Kentucky Wired Fiber Optic Network. The project funds purchasing				
routing hardware and firewalls to support the Kentucky Regional Optical Network (KyRON) and Kentucky				
Post-Secondary Network (KPEN) that will be migrated to the Kentucky Wired network. The networking				
equipment will serve all public postsecondary education institutions and community colleges. Currently, CPE				
has requested to use \$2 million of federal COVID-19-related funds (American Recovery Plan) to upgrade				

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KyRON to reflect the new technology being implemented by Internet2 to support teaching, learning, and				
research. The capital request presented here (i.e., the \$1,000,000 KyRON Upgrade) will install a router and				
firewall on each campus to take advantage of the KyRON system upgrade which may be funded with ARP				
funds.				
KY Community and Technical College System				
KCTCS Information Technology Pool				
This project is to upgrade and expand the current KCTCS information technology infrastructure, particularly	9,500,000			9,500,000
to leverage the 10GB connectivity coming via the Kentucky Wired project. These infrastructure improvements				
are necessary to expand higher education, promote economic development in communities, and provide				
access to local, statewide, national and international resources.				
KY State University				
Replace Enterprise Resource Planning System				
This project will improve and expand the functionality of the enterprise resource planning system and ancillary	5,000,000			5,000,000
systems to ensure that the requirements of the University are being met and future advancements can be				
realized.				
Upgrade Information Tech Infrastructure 2018				
This project continues to upgrade the data infrastructure and network (wired and wireless) for data, voice and	12,263,000			12,263,000
video. This project includes the purchase and installation of fiber, cabling inside the buildings, network and				
communications equipment and services, video systems and other items related to the maintenance,				
enhancement, redundancy and security of the KSU data infrastructure and systems. Due to advancements in				
technology, this project will be continuous.				
Morehead State University				
Enhance Library Automation Resources				
The Library's automated system is reaching the end of its product life cycle and must soon be replaced. The	1,608,000			1,608,000
system vendor has been sold twice since we purchased it in 1999, and we expect that the vendor will				
discontinue support of the system within the next several years. The current system no longer meets the				
needs and expectations of today's students and faculty. Additional specialized automation software is also				
needed to manage electronic resource and documents imaging. Modern technology is necessary to allow full				
participation in database access and resource sharing through the Kentucky Virtual Library.				
Enhance Network/Infrastructure Resources - Add'l				
The University continues to have a great need to maintain modern, technologically advanced	3,219,000			3,219,000
networking/infrastructure equipment for transmission of voice, data, and video signals. This project is an				
addition to a previously authorized project ("Enhance Network/Infrastructure Resources") and includes				
multiple items/systems related to the maintenance and improvements to the campus network infrastructure				
and systems.				
Upgrade Instruct. & Business PCs/LANS/Digitization				
It is the University's objective to continue with implementation of technology that effectively enhances the	2,088,000			2,088,000
productivity of departments in the delivery of services to students. This project will enable the continued				

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implementation and expansion of technology solutions and extend the availability of student services to				
remote/distance students.				
Murray State University				
Replace Campus Comm Infrastructure (Fiber Ring)				
This project will replace existing telephone and data lines with state of the art redundant fiber optic media	4,640,000			4,640,000
(fiber ring). Replacing fiber optic cable will provide added capacity, redundancy and reliability.				
Northern KY University				
Scientific/Technology Equip Pool				
This equipment pool includes scientific/technology equipment to support instruction and research in the basic	10,000,000			10,000,000
sciences.				
Upgrade Admin/IT Infrastructure Pool				
This pool of funds provides authority for various upgrades to administrative information technology	15,950,000		6,000,000	21,950,000
infrastructure. Project financing pursuant to KRS 45.763 is requested.				
Western KY University				
Upgrade IT Infrastructure				
The purpose of this project is to upgrade the IT infrastructure to handle escalating bandwidth and enterprise	6,000,000			6,000,000
storage demands resulting from increased enrollment, large data transfers, streaming media, proliferation of				
unstructured data, increased reliance on data analytics and the addition of Campus-wide wireless capability.				
While all of these initiatives have created new demands on our network, especially the network core, which				
must be addressed from a capacity standpoint, we have now reached a point where much of our critical				
equipment has reached end-of-life and must be replaced just to ensure network and systems reliability.				