Advancement of the Registry of Child Exploitation Material

A Report to the Secretary of Public Safety and Homeland Security, the Senate Finance Committee, the House Appropriations Committee, and the Director of the Department of Planning and Budget

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TO: The Honorable Brian J. Moran
Secretary of Public Safety and Homeland Security

The Honorable Janet D. Howell
Chairman of the Senate Finance Committee

The Honorable Luke E. Torian
Chairman of the House Appropriations Committee

Mr. Daniel S. Timberlake
Director, Department of Planning and Budget

Pursuant to the 2019 Virginia Appropriation Act; I am respectfully submitting herewith a report on the *Registry and the expected cost and needs.*

Respectfully,

Gary T. Settle

Superintendent

GTS/ACW/jbc

Enclosure

ADVANCEMENT OF THE REGISTRY OF CHILD EXPOLOITATION MATERIAL

OVERVIEW OF THE ICAC TASK FORCE

The Internet Crimes Against Children (ICAC) Task Force is charged with investigating crimes perpetrated against children through the use of technology. This initiative is consistent throughout the U.S. due to oversight and guidance provided in a national program under the Office of Juvenile Justice and Delinquency Prevention (OJJDP). Despite the efforts to address these complex and very serious crimes, there are still many who choose to actively prey upon our children and they are in a constant search to stay one step ahead of law enforcement.

The Internet and computers have become so commonplace in American life that all communities are impacted by their use. According to the U.S. Census Bureau's Computer and Internet Use in the United States 2016 Survey, more than 83 percent of individuals in Virginia live in a household with high speed internet access which is approximately two percent higher than the national average. This translates to increased access by online child sexual predators in the state of Virginia, in the United States, and globally. This dynamic has contributed to an increase in the overall activities of the ICAC task forces. The task forces continue to experience a large number of predators willing to travel great distances and even from other countries to meet children with whom they have developed an online relationship. Many law enforcement agencies are closely evaluating their agency's investigative and personnel priorities; however, most ICAC affiliate law enforcement agencies continue to keep Internet crimes against children investigations a priority.

For example, as the coordinating agency of the Northern Virginia and District of Columbia ICAC Task Force (NOVA-DC ICAC), the Virginia State Police respects and appreciates the collaboration of 64 participating agencies. Collectively, we are proactive in our pursuit of those who prey upon our children, while simultaneously striving to prevent child victimization through collaboration, training, community outreach, and enforcement.

The hard work and dedication of the many NOVA-DC ICAC personnel are documented in numerous reports, media releases, and public presentations. The various metrics included in the DOJ/OJJDP Reports have been compiled and incorporated below for the fiscal year July 1, 2018 through June 30, 2019 in order to show the need for increased and continued support of this topic.

The NOVA-DC ICAC experienced a 41% increase in the number of Child Enticement complaints, and 125% and 105% increases in cases submitted for federal prosecution and accepted for federal prosecution, respectively. Further, NOVA-DC ICAC personnel obtained and executed 2,850 federal, state, and local court orders or subpoenas, which is a 30% increase from the previous fiscal year. Additionally, the number of Cyber tips received increased from 1,175 to 2,570 this fiscal year; a 119% rise.

These numbers provide just a small picture of what each ICAC Task Force across the nation is experiencing. The statistics provided above reinforce how important this

matter is and why we must address it. Ideas are always being shared in order to expand the abilities of the task forces and to better combat this problem throughout the nation. One way we are working to address this is through the Registry.

The Registry

One key aspect of the ICAC task force in Virginia is the maintenance of the registry of child exploitation images obtained during investigations, as mandated in §19.2-390.3, of the Code of Virginia. This statute provides that the Office of the Attorney General (OAG) in cooperation with the Department of State Police (VSP) shall keep and maintain a Child Pornography Registry. This Registry exists for the purpose of assisting statewide law enforcement agencies investigating child exploitation cases by providing a system to aid in the identification of victims and offenders.

Currently, a systems administrator/image analyst based within the NOVA-DC ICAC maintains the Registry. This individual works to ensure the child pornography files are appropriately stored and updated. The current work flow is as follows:

1. The images/videos and submission form are received and processed via mail or hand delivery from the investigating law enforcement agency.
2. Child pornography (CP) images are imported into a new Analyze Digital Intelligence case.
3. Once imported, the images must be categorized as pertinent or non-pertinent to child exploitation, then further categorized based on severity of the conduct depicted.
4. The administrator then exports the CP files and JSON (JavaScript Object Notation) files to a staging folder on the server.
5. All hash databases are then updated with the most recent hash list. The hash is the information that identifies a particular child pornography image. This information is specific and unique to each image.
6. The administrator creates a new case in Griffeye Collaborative Server (CS). *insert one sentence explanation of what Griffeye is
7. The data from the staging folder is then imported to the new CS case.
8. The import is then verified.
9. The administrator will identify any conflicts or variances to previous categorizations of the images and address those differences.
10. The administrator will then mail back any media (thumb drives/hard drives) to the original submitting investigator if needed.
11. The categorized hashes are submitted to Project Vic.
12. Images/videos are submitted to the National Center for Missing and Exploited Children (NCMEC).
13. Finally, the administrator will submit the resulting NCMEC report to the original submitting investigator.

This process is very time consuming and inefficient. The goal is to change the current work flow through the addition of skilled personnel, equipment, and software in order to make the system more efficient, thus enabling a more rapid response to requesting law enforcement agencies.

Registry Requirements and Proposed Changes

The current process can be improved by speeding up the method of image submission and expanding the analytical support in order to analyze and categorize the images more rapidly. This would lead to quicker identification of new, child victims. Currently, one system the NOVA-DC ICAC uses to facilitate the de-confliction of child exploitation case information between Virginia law enforcement agencies is called iCrITT. Ongoing efforts to improve this system include streamlining the data entry process in an effort to expand victim identification capabilities. This will aid participating Virginia law enforcement agencies by logging into the iCrITT system to see whether other agencies may be working the same target in an investigation and to cross reference child pornography images with the Registry that appear during their investigations.

Currently, we are working to expand the capabilities of iCrITT and fully implement it into the daily operations of the NOVA-DC ICAC, to include its child pornography registry management. For this to be a long-term solution we will need additional funding to continue to expand iCrITT or implement a similar, new system if such is more efficient and cost effective. iCrITT is currently funded until June 2022 but not beyond. The annual cost to operate this system breaks down as follows:

iCrITT Cloud Fee, monthly	$12,275.32	$147,303.84
Yearly Maintenance Fee		$10,000.00
Yearly Griffeye Fee		$37,000.00
		$194,303.84

Funding is needed to continue expansion beyond June 2022. Once the proposed changes are made to the system, an investigator will be able to enter case de-confliction information and have exploitive hash images attached in a more efficient and timely manner.

As previously mentioned, images are received from investigators via US Mail or by hand delivery. This is a time-consuming process, which also requires the use of digital media that must be returned. Currently, NCMEC is implementing an electronic submission system via a service called BOX. This system is essentially a file-sharing system that is encrypted end-to-end and requires a key to unlock the file. NCMEC is receiving child exploitation materials at this time using this system to speed up their receiving process. We would propose using this or a similar system to accelerate our image processing and storage capability. Implementing the BOX file transfer system would cost approximately $45,000 for the initial setup and first year, with a recurring annual cost of $25,000.

In order to more effectively handle this process, we would request three (3) lead analyst positions and one systems administrator/Image analyst be funded to handle the image processing, image entry and victim identification. The estimated cost is $100,000 per position, including benefits and salary. Therefore, the total per year estimated cost would be $300,000. Having these analyst positions would help us expand our ability to receive, process and analyze the images we continually receive. Additionally, they will

help with the non-image analytical component of the ICAC's ever increasing case load. This need continues to grow with each passing day, as evidenced from the increased number of Cyber Tips received by the NOVA/DC ICAC over the past few years. In 2016 we received in excess of 800 Cyber Tips. This amount increased each calendar year and in 2019 exceeded 2,400. This increased case load will require analytical support during the investigation as well as to process the increased number of images received once the case is complete.

This process also requires the use of a Systems Administrator and Image Analyst. For this reason, we request additional funding for the current Systems Administrator/Image Analyst. This position aids in working on and maintaining not only the iCrITT system but also the server and network equipment used to store and maintain the images. The annual cost of this position, including salary and benefits would be $131,975. Currently, we fund this with our ICAC fund given through the General Assembly. If we were able to move the funding to this Registry Initiative it would free up funds to allow us to expand our program in other ways.

The NOVA-DC ICAC investigates technology facilitated criminal activity. These complex investigations are conducted in an evolving environment. While emerging technologies may serve to enhance the capabilities of the investigator, they also serve to advance the capabilities of the criminal element, making investigations more challenging. The NOVA-DC ICAC strives to ensure that each fully participating affiliate has the necessary equipment and software to enable them to conduct thorough and comprehensive investigations. Such expenditures include equipment as well as the ongoing support and maintenance required for software licenses and updates. This includes the equipment involved in maintaining the registry.

Through the current funding appropriated for ICAC, the NOVA-DC ICAC purchased much needed equipment to support the investigative processes. In order to continue the Registry, we will need additional funding to maintain Registry equipment. We recently updated the system at a cost of $20,221. This allowed us to continue operating and to cover the amount of data that we have received thus far; however, additional funding will be needed to cover the cost of maintaining and replacing the system once end of life has been reached. We estimate end of life will occur in the next five years and estimate the hardware replacement cost at $55,000 and software at $20,000. There would also be an annual software and hardware costs of $3,000. Without this funding, we will have to use current funding, which will limit our ability to equip our agents and affiliate members with the tools needed to investigate these crimes.

In summary this a very important process with many evolving demands. Below is a chart which displays and summarizes the costs mentioned in this document:

	One Time Costs	Annual Costs
IcrITT		$193,304.84
Box System	$20,000	$25,000
Personnel		$431,975
Hardware/Software	$75,000	$3,000
Total	**$95,000**	**$653,779.84**