

Lake County Crime Laboratory
2022 American Rescue Plan Act
Crime Lab Backlog Grant
Program Narrative

The Lake County Crime Laboratory proposes to utilize the grant funding in a backlog prevention manner, in order to proactively circumvent the potential for a backlog of controlled substance and firearms cases.

As evidenced by the below charts, the laboratory does not currently maintain a significant backlog of analysis requests; however, the DNA, Latent Print, and Trace Evidence/Fire Debris departments saw a significant decrease in the number of analysis requests from 2018 through 2021 and this decrease continues today. The Controlled Substances and Toxicology departments remained fairly steady during this same time frame and the Firearms department saw a significant increase in analysis requests. It is understood that many of the Lake County Law Enforcement agencies are still under COVID-19 restrictions. Once these restrictions are fully lifted, the laboratory expects the analysis requests to return to normal or even increase further.

The Lake County Crime Laboratory did not enter full work stoppage during the COVID-19 pandemic and only maintained a minimal staff level for the initial 3 months of the pandemic (April-June 2020). With the laboratory working at full staff while there was a decrease in analysis requests and more time spent in the laboratory due to the courts not being in session, laboratory scientists set out to reduce and maintain a minimal backlog in anticipation of a return to normal.

	Backlog as of 2/1/2022	Backlog as of 12/31/2021	Backlog as of 1/3/2020	Backlog as of 1/2/2019
DNA Analysis	0	6	2	6
Controlled Substances	11	26	132	24
Latent Prints	0	0	1	1
Firearms	0	0	0	0
Toxicology	3	0	0	17
Trace Evidence/Fire Debris	4	3	51	25

	Requests for Analysis 2021	Requests for Analysis 2020	Requests for Analysis 2019	Requests for Analysis 2018
DNA Analysis	319	412	499	552
Controlled Substances	1125	1150	1208	1233
Latent Prints	193	262	251	355
Firearms	358	264	203	188
Toxicology	101	121	147	126
Trace Evidence/Fire Debris	58	124	148	145

Over the last two years, it was noted that the Firearms water recovery tank has begun to leak in multiple locations. The scientists and county maintenance workers have done their best to seal any leaks; however, the water recovery tank is over 30 years old. Should this tank begin to leak beyond repair, the firearms department will be unable to process routine requests for analysis until a replacement tank is obtained. To proactively prevent a backlog from occurring due to the significant increase in the number of requests for Firearms analysis, the laboratory proposes to purchase a new water recovery tank for Firearms. The tank will be assembled on site by the manufacturer and the Firearms Supervisor, along with the Laboratory Director, will oversee the project.

The laboratory is committed to keeping weapons out of the hands of those who would use them to do harm and feels that to be proactive in the prevention of a backlog is of vital importance to its customers and the community. The Lake County Crime Laboratory receives numerous investigative leads through the NIBIN database, linking multiple crimes to a single weapon, within our service area as well as with crimes committed in Cuyahoga County.

It is a well-known fact that opioids and other novel synthetic drugs continue to plague Ohio. The Lake County Crime Laboratory currently utilizes two GC-MS instruments that must be shared between three scientists. With the current backlog, this does not pose an issue; however, once workloads return to normal, the Controlled Substances department could quickly return to a backlog more in line with the beginning of 2020. Once workloads return to normal, should one of the two current GC-MS instruments require repair or cease to function properly, it would be detrimental to the laboratory and its customers, as they would be waiting months for Controlled Substances reports as opposed to the weeks that is the current average turn around time.

The laboratory proposes to purchase an additional GC-MS instrument that also has vapor-phase IR capability. Not only with a third instrument allow for all scientists to perform analysis simultaneously, the vapor-phase IR will allow the laboratory to identify substances that may be isomers or other novel substances that are currently difficult and time consuming to identify, allowing these substances to be reported to the law enforcement agencies as quickly as possible. The laboratory continues to see newly emerging substances at an alarming rate.

Once purchased, the instrument would be required to undergo validation to ensure that it is producing the optimum results for our customers. The Controlled Substances Supervisor would be in charge of planning the validation and reviewing all validation data, along with the laboratory's Quality Manager, to ensure that all quality requirements are met prior to use on casework.

Performance Measures

Baseline Metrics	Number of reports issued in 2021	Average number of days from receipt of evidence to report issuance on 2/1/22	Number of cases pending over 30 days on 2/1/22
DNA Analysis	319	25	0
Controlled Substances	1125	40	11
Latent Prints	193	14	0
Firearms	358	15	0
Toxicology	101	17	3
Trace Evidence/Fire Debris	58	25	4

The above laboratory performance measures can be evaluated at any time, as they are captured within the Laboratory Information Management System.

Budget

The laboratory was able to obtain quotes for the proposed grant funded items; however, as both items exceed the county's cost requirement for bidding, bids will be obtained for both items. The cost of the Firearms water recovery tank is estimated to be approximately \$60,000 and the cost of the GC-IR-MS instrument is estimated to be approximately \$190,000. Therefore, the Lake County Crime Laboratory is requesting \$250,000 in grant funding.

Should the accepted bids total less than expected, the laboratory will not utilize the remaining funds. Should the accepted bids total more than expected and exceed funding levels, the laboratory will assume responsibility for the remaining excess balance.

Total cost for the Firearms water recovery tank include the cost of the tank, any necessary accessories and on-site installation. The water recovery tank is sizeable and will be delivered to the laboratory in pieces which will then be welded together on-site and ensured to be functional and without leaks before completion.

The cost for the GC-IR-MS in Controlled Substances includes all necessary components and software, expert installation and training for the Controlled Substances scientists on the operation and maintenance of the instrument. As the laboratory does not currently utilize vapor-phase IR, training is necessary for the scientists to learn use and care of this portion of the instrument. The laboratory will assume all costs for any additional gas line plumbing and a nitrogen generator for use with the vapor-phase IR portion of the instrument.

Executive Summary

The Executive Summary serves as a concise and accurate description of the proposed project. Information in the Summary is forwarded to the Governor's Office and other local, state and federal agencies for public information requests. Summary information must be submitted in the space provided.

The purpose statement is a clear concise statement that explains the purpose of the project. It describes what the applicant is going to do; the population that is going to be served; how it will be accomplished; and why it is important.

PURPOSE STATEMENT

The purpose of this grant is to purchase necessary equipment for the Firearms and Controlled Substances section in order to prevent a backlog in the testing process. This project will serve the entire population of Lake County as well as any other communities that choose to utilize Lake County Crime Laboratory services.

PROBLEM STATEMENT

The current water recovery tank in the Firearms section is aging and has multiple leaks. Without replacement, the Firearms department would be unable to perform crucial testing should the tank begin to leak beyond repair. Additionally, the Controlled Substances department is currently sharing two GC-MS instruments between three scientists, which significantly slows the analysis process. Further, should either of the instruments require repair and become out of service, it would be detrimental to the Controlled Substance backlog.

PROJECT DESCRIPTION

The grant funds will be utilized to purchase for the Firearms section a water recovery tank, which will include the cost of the tank, any necessary accessories and on-site installation. In addition funding will be utilized to purchase for the Controlled Substances section a GC-IR-MS, the cost will include all necessary components and software, expert installation and training for the Controlled Substances scientists on the operation and maintenance of the instrument. As the laboratory does not currently utilize vapor-phase IR, training is necessary for the scientists to learn use and care of this portion of the instrument. The laboratory will assume all costs for any additional gas line plumbing and a nitrogen generator for use with the vapor-phase IR portion of the instrument.

PARTICIPATING AGENCIES / COLLABORATION

The project will serve the entire population of Lake County as well as any other communities that choose to utilize Lake County Crime Laboratory services. Any outside agency utilizing the Lake County Crime Laboratory's services will be required to pay a fee for these services.