



AGENDA REPORT

TO: Edward Reiskin
City Administrator

FROM: LeRonne Armstrong
Chief of Police

SUBJECT: OPD 2021 DNA Backlog Reduction
Program

DATE: January 12, 2022

City Administrator
Approval

Date Jan 20, 2022

RECOMMENDATION

Staff Recommends That The City Council Adopt A Resolution: 1) Authorizing The City Administrator 1) Accept And Appropriate Grant Funds In An Amount Not To Exceed Three Hundred Sixty-Seven Thousand Eight Hundred Ninety Eight Dollars (\$367,898) From The U.S. Department Of Justice, Office of Justice Programs, Bureau of Justice Assistance For Implementation Of The FY (Fiscal Year) 2021 DNA Capacity Enhancement For Backlog Reduction Program For The Oakland Police Department (OPD); And

2) Waive The City's Advertising And Competitive Bidding Requirements For The Purchases Of DNA Typing Supplies And Equipment From (1) Qiagen For Fifty-Five Thousand Six Hundred Dollars (\$55,600), (2) Promega For One Hundred Seventy Thousand One Hundred Dollars (\$170,100), (3) Thermo Fisher/Life Technologies For Forty-Two Thousand Two Hundred Thirty Dollars (\$42,230), (4) NicheVision For Eighty Thousand Dollars (\$80,000), And (5) Fisher Scientific For Twelve Thousand Eight Hundred Ninety-One Dollars (\$12,891).

EXECUTIVE SUMMARY

Adoption of this resolution will allow OPD to accept the U.S. Department of Justice (DOJ), Office of Justice Programs (OJP), Bureau of Justice Assistance (BJA) Fiscal Year (FY) 2021 DNA Capacity Enhancement and Backlog Reduction grant of \$367,898, which will fund the continuation of staff training and DNA analysis equipment costs. The OPD Crime Laboratory (Crime Lab), with these grant funds, will be able to decrease the biological evidence analysis turnaround time and the backlog of cases. This resolution also calls for waiving the City's Advertising and Competitive Bidding Requirements because of the need to purchase specialized laboratory-validated DNA typing equipment, reagents, and supplies available only from specific vendors.

BACKGROUND AND LEGISLATIVE HISTORY

DNA Forensic Analysis is a cornerstone of modern law enforcement investigations. DNA is the hereditary material found in nearly every cell in the human body. Body fluids such as blood,

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semen, and saliva can be left behind at a crime scene. Evidence collected from crime scenes are submitted for DNA analysis for the purpose of trying to identify the type of body fluid and origin of the biological material. The DNA Capacity Enhancement for Backlog Reduction (CEBR) Program is a formula grant created by the DOJ/OJP/BJA to assist laboratories that conduct DNA analysis.

The aggregate amount of FY 2021 funds expected to be awarded to eligible applicants from each State was based on a determination by the BJA of a primary and a secondary amount, and then distributed among the eligible applicants within the State of which \$367,898 was allocated to OPD.

The goal of the program is to improve DNA laboratory infrastructure and analysis capacity so that DNA samples can be processed efficiently and effectively. The program also provides continuing education courses and training associated with DNA analyses required by rules governing the Combined DNA Index System (CODIS), as well as funds to analyze backlogged forensic DNA casework samples. Improvements are necessary and critical to reduce current DNA backlogs, prevent future increases and to help the criminal justice system reach its full potential in the utilization of DNA technology.

Backlogged case requests from homicides, sexual assaults, robberies, assaults, and property crime cases will be enrolled into the FY 2021 DNA Backlog Reduction Program. The eligible DNA profiles obtained from evidence in these cases will be entered into CODIS. DNA profiles entered into CODIS have resulted in an approximate seventy-three percent hit rate.¹ This will assist not only Oakland Police Department investigators, but also the Alameda County District Attorney, and other law enforcement, prosecutorial, and judicial agencies in the surrounding area.

DNA Capacity Enhancement for Backlog Reduction Program History

The City Council previously authorized acceptance of similar grant funds almost every year for the last 16 years. The last five Council-adopted resolutions are listed below²:

- Resolution No. 88358 C.M.S., dated November 10, 2020;
- Resolution No. 87996 C.M.S., dated January 21, 2020;
- Resolution No. 87429 C.M.S., dated November 1, 2018;
- Resolution No. 87428 C.M.S., dated September 27, 2018; and
- Resolution No. 86982 C.M.S., dated November 2, 2017

Privacy Policy for Biometric Technology

A list of technologies was introduced by the Crime Lab to the Privacy Advisory Commission (PAC) where both a Surveillance Impact Report and a Biometric Technology Use Policy for DNA Instrumentation and Analysis Software were provided to and recommended by the PAC. The City Council approved the Use Policy and via adoption of Resolution No. 88388 C.M.S. on December 1, 2020.

¹ "Hit rate" is defined as that portion of cases with DNA profiles submitted to CODIS in which an association to a named individual or case-to-case (either solved or unsolved) is made to a DNA profile(s) in the database.

² The resolution accompanying this report lists all of the Council-adopted resolutions.

ANALYSIS AND POLICY ALTERNATIVES

Violent crimes which occur in Oakland and surrounding areas cause trauma as well as negative economic impacts for victims and their families. The ability to solve crimes and close cases allows the victims to have closure and, in some cases, financial compensation. The funding from this grant provides the Crime Lab's Forensic Biology Unit with expanded means to examine and analyze over two hundred and fifty of these types of cases. The Crime Lab will focus on four goals with the implementation of the FY 2021 DNA Backlog Reduction Program grant initiative:

Goal #1: Reduce the Average Turnaround Time

The analysis of the backlogged cases will include case evaluation, biological evidence examination and screening, DNA typing, technical review, and data entry into CODIS. A minimum of 252 backlogged case requests will be analyzed using grant funds for DNA typing reagents and supplies. The supplies will include capillaries and associated polymer for the instruments, DNA extraction kits, quantitation kits, and typing kits. These readily available supplies will alleviate the time waiting for supplies to arrive at the Laboratory, thus reducing the turnaround time. Other laboratory funds will be used to purchase consumable supplies such as gloves, masks, scalpels, and plastic-ware.

Goal #2: Provide Required Continuing Education for Each Criminalist and Forensic DNA Technician

The Criminalistics Division must comply with several types of credentialing processes:

- ANSI-ASQ National Accreditation Board accreditation (ANAB)
- Certification of individual scientists
- National DNA Index System (NDIS) requirements for CODIS data entry
- American Board of Criminalistics educational requirements
- Federal Bureau of Investigation (FBI) DNA Quality Assurance Standards (QAS) mandatory education and training requirements

To comply with and maintain the Criminalistics Division's required accreditations, scientific staff must obtain continuing education credits. The Criminalistics Division and Forensic Biology Unit do not have independent budgets for training. This federal grant will fund travel and tuition for various conferences and training opportunities. Crime Lab staff will leverage conferences and training to learn about new technologies. By the end of the award period, it is expected that five out of twelve Forensic Biology Unit Criminalists and Forensic Technicians will have fulfilled all of their annual required continuing education through this grant.

Goal #3: Increase Capacity of the Crime Lab for Forensic Casework

The Crime Laboratory will use grant funds to purchase one freezer and three refrigerator/freezer units. These cold storage units will replace four older units with energy efficient ones. Evidence, laboratory samples, DNA typing kits, and reagents are required to be stored in cold temperatures ranging from -20 to 5 degrees Celsius. Therefore, replacing the older freezer and

refrigerator/freezer units will save energy and prolong the shelf life of evidence and DNA typing reagents thus increasing the capacity of obtaining DNA typing results.

Goal #4: Purchase Service and Maintenance Contracts and License Upgrades for DNA Typing Software and DNA Typing Instruments

The Crime Laboratory will use grant funds to purchase annual service contracts for existing real-time PCR quantitation and genetic analyzer instruments and operating software, for the purchase of annual contracts for the upgrade and maintenance of existing DNA typing software, and for the implementation and validation of existing mixture deconvolution software. Service contracts and licensing upgrades are vital to the laboratory's ability to generate DNA profiles in a timely manner. Thus, the ability to maintain and/or upgrade instruments and software will increase the capacity of conducting DNA typing on case samples.

Waiver of the Advertising and Bidding Process

Section 2.04.050.1.5 (Bid Procedure) explains that the City can make exceptions to its competitive bidding process when City Council finds and determines that it is in the best interest of the City. Purchasing DNA supplies and typing instruments from vendors other than those who manufacture DNA kits and instruments used by the Crime Laboratory would not be acceptable for this federal grant. The Forensic Biology Unit has conducted extensive validation studies as part of the selection process in determining which typing kits and instruments to implement in OPD's evidence processing scheme. The use of other products which have not been validated would hence violate the FBI DNA QAS; OPD therefore believes that waiving the competitive bidding process in this instance is in the best interest of the City. The Crime Lab must adhere to FBI DNA QAS standards to enter DNA profiles into CODIS for searching. The reagents to be purchased through this grant include: DNA extraction kits (Qiagen), DNA quantitation kits (Promega), DNA typing kits (Promega), DNA typing supplies (Thermo Fisher/Life Technologies), typing software (NicheVision), and cold storage units (Fisher Scientific). These reagents and software from these specific vendors have undergone rigorous validation studies and no vendor substitutions are acceptable.

FISCAL IMPACT

The table below details how OPD will utilize the DOJ/OJP/BJA FY 2021 DNA Backlog Reduction Grant Program funds. The table lists the use of funding for staff travel and training, and technology and supply costs.

Budget Category	Amount
Training and Travel	
Travel, lodging and registration costs	\$7,077
Total Training and Travel	\$7,077
Equipment	
Cold storage units (freezer, refrigerator/freezer)	\$12,891
Total Equipment	\$12,891
Technical Supplies	
DNA Typing Supplies (Qiagen)	\$55,600
DNA Typing Supplies (Promega)	\$170,100
DNA Typing Supplies (Thermo Fisher/Life Technologies)	\$15,230
Total Technology and Supplies	\$240,930
Procurement Contracts	
Software Upgrade, Maintenance, and Validation (NicheVision)	\$80,000
Performance Maintenance (Promega)	\$27,000
Total Procurement Contracts	\$107,000
TOTAL	\$367,898

The \$367,898 in grant funds from the DOJ/OJP/BJA for the implementation of the FY 2021 DNA Backlog Reduction Grant Program shall be appropriated in the Federal Grant Fund (2112), Criminalistics Division Organization (102610), Criminalistics Division Program (PS05), in a Project Number (1005904).

Fiscal Year	Fund Source	Organization	Account	Project	Program	Amount
2022-2023	2112	102610	TBD	1005904	PS05	\$367,898

PUBLIC OUTREACH / INTEREST

The public has a significant interest in ensuring that the OPD Crime Laboratory can effectively process DNA evidence; successfully processed DNA evidence helps OPD with investigations by either rejecting individuals excluded by the evidence or leads to effective criminal prosecutions.

COORDINATION

The Budget Bureau and the Office of the City Attorney were consulted by OPD on the production of this report as well as the accompanying resolution.

SUSTAINABLE OPPORTUNITIES

Economic: There are no economic opportunities associated with this report.

Environmental: There are no environmental opportunities associated with this report.

Social Equity: Provisions for continuing education and supplies funded by this grant will enhance OPD's ability to analyze biological evidence in criminal cases in a timelier fashion. The public safety for all Oakland residents and visitors is enhanced through greater OPD investigative capacity, through the use of science-based methods which mitigates potential bias.

ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends That The City Council Adopt A Resolution: 1) Authorizing The City Administrator 1) Accept And Appropriate Grant Funds In An Amount Not To Exceed Three Hundred Sixty-Seven Thousand Eight Hundred Ninety Eight Dollars (\$367,898) From The U.S. Department Of Justice, Office of Justice Programs , Bureau of Justice Assistance For Implementation Of The FY (Fiscal Year) 2021 DNA Capacity Enhancement For Backlog Reduction Program For The Oakland Police Department (OPD); And 2) Waive The City's Advertising and competitive Bidding Requirements For The Purchases Of DNA Typing Supplies and Equipment From (1) Qiagen For Fifty-Five Thousand Six Hundred Dollars (\$55,600), (2) Promega For One Hundred Seventy Thousand One Hundred Dollars (\$170,100), (3) Thermo Fisher/Life Technologies For Forty-Two Thousand Two Hundred Thirty Dollars (\$42,230), (4) NicheVision For Eighty Thousand Dollars (\$80,000), And (5) Fisher Scientific For Twelve Thousand Eight Hundred Ninety-One Dollars (\$12,891).

For questions regarding this report, please contact Bonnie Cheng, Criminalist II, at (510) 238-3386.

Respectfully submitted,



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