CASE STUDY

Bergen County, New Jersey Department of Human Services

Fulcrum Biometric Framework (FbF®)

Homeless Services Management System

Fulcrum Biometric Framework (FbF®) enabled the rapid development of an easy-to use finger image identification system that allows the Bergen County Department of Human Services in New Jersey to better serve their homeless population.

Fulcrum Biometrics worked with New Jersey Business Systems' Eyemetric division to develop and deploy a new, biometrically-enabled homeless services management system based on the FbF® modular development framework.

The new Biometrics Data Management System (BDMS) has enabled the Bergen County, New Jersey Department of Human Services (DHS) to eliminate duplicative paperwork and time-consuming data entry tasks by using finger image scans to quickly and efficiently document individuals who are receiving services.

The system, which was designed to streamline the sign-in process for basic services including meals and overnight shelter, has also enabled DHS to better document the use of additional drop-in services such as showers, caseworker appointments and computer and telephone use. By providing accurate, unduplicated client counts for each service provided and then feeding that information into the county's Homeless Management Information System (HMIS) database, the BDMS gives DHS more detailed demographic information about the populations they serve and the services that are used most often. This has enabled them to better support funding requests and grant applications while ensuring that DHS is providing the most-needed services to the homeless community.

The new biometric system not only makes it faster and easier for individuals to sign-in for access to services, it has freed up many hours of staff time – time that is now devoted to working with people in need.

THE CUSTOMER
Bergen County, New Jersey Department of Human Services (DHS)

THE CHALLENGE
Bergen county DHS sought a biometrics-based system that would help them track utilization of high-volume, high-traffic services they provide for homeless individuals in the county, The system also needed to feed data into the state database and eliminate duplicate records

THE SOLUTION
Fulcrum Biometrics worked with New Jersey Business Systems/Eyemetric to develop a highly customized application for Bergen County that is fast, accurate and easy to use for both county personnel and people seeking services from DHS. Biometrics provide a fast and easy way to eliminate timeconsuming data entry tasks while ensuring accurate identification with minimal effort from the client. Fulcrum's FbF development framework allows the system to easily exchange information between the county's homeless databases as needed while still allowing the county's system to function independently

WHY FULCRUM
Fulcrum's unique technology - its modular Fulcrum Biometric Framework (FbF®) - enabled Eyemetric to provide a robust system that is cost-effective and flexible enough to expand in scope and scale as needed

A biometric solution that is easy, cost-effective and tailored to meet the needs of Bergen County and the populations they serve

In 2009 Bergen County DHS sought a new, web-based biometric system to replace an outdated, paperbased process and to better track utilization of services provided for homeless individuals in the county. They wanted the system to allow quick client access to high-volume, high-traffic services such as food and housing assistance through DHS's new Housing, Health and Human Services Center while ensuring accurate identification and an unduplicated client count. The County also required the solution to feed this data to the larger Homeless Management Information System (HMIS) database.

Fulcrum Biometrics, a leading international provider of biometric identification solutions worked with the County's contract holder, New Jersey Business Systems' Eyemetric Identity Systems division, to develop an easy-to-use finger image identification system – the Biometrics Data Management System (BDMS) – that enables homeless individuals to quickly gain access to services without needing to sign forms. The system, which was implemented in 2010, has been well received, both by staff at the center and by the homeless individuals coming there for services.

In the past, when a person showed up at the center for a meal or a place to stay for the night (known as a bed-night), he or she had to physically sign in on paper and a staff person would document the information as quickly as possible to keep the line moving. Each time a client took advantage of an additional service, such as using the telephone or taking a shower, he or she had to sign in again. At the end of the day, a staff person had to tally all of the paper-based information and enter it into a computer. Because of limited staff resources and the time-consuming nature of the manual data entry system, DHS was not able to track usage for all services and only bed-nights were reported to the HMIS database. Because signature-based sign-in is more prone to errors, they could not be 100% certain if they had an accurate count of individuals receiving services.

Now, with the new BDMS, the first time an individual comes to the center a finger image is scanned and he or she is enrolled into the system. The biometric information is then uploaded to the HMIS database, which maintains identity and demographic information about the person, such as age and gender. After that, each time that individual wants to use a service, he or she simply places a finger on the scanner and is immediately logged into the system as having used that service. At the end of the day, or any designated time period, the system can generate reports for analysis by staff and for submission to the HMIS database.

If individual clients want to remain anonymous for any reason, they do not need to provide their names; they are assigned unique numbers and the system simply tracks which services are used. This maintains confidentiality for those who want it (which is often the case in domestic abuse situations) and still enables DHS to track which services are being used, how often and by which population demographic.

FbF enables high customization and integration with low development costs.

Using the Fulcrum Biometric Framework (FbF) modular approach to building multi-biometric software, Fulcrum was able to quickly develop and provide a highly customized application for Bergen County DHS that operationally functions independently of the county's HMIS, yet still provides for the exchange of information between the two systems, eliminating duplicate data entry.

"User-friendliness was one of our primary goals and we have that in this system. We open a web page, select the service and location, apply the finger image and we're ready to go."

– **Jane Linter**, Director Bergen County Department of Human Services

Fulcrum Biometrics worked with Eyemetric to develop a data-sharing method that periodically augments the HMIS data while still allowing Bergen County DHS to run their daily operations totally independent of it.

The system uses finger image scanners from Futronic Technology and a high-speed, highly accurate finger image matching algorithm from Neurotechnology. Fulcrum used the FbF framework to develop a webbased application that communicates via Fulcrum's proprietary BioXML, web services interface to start tagging biometric data collected from the various DHS service areas. The data is then merged into singular records that resolve back to individual identities inside the HMIS system.

Because of this unique approach, DHS is able to rapidly and easily acquire an accurate count of homeless persons for whom services are provided at any given time. The end result of the solution is a true, unduplicated count of persons served by the various Bergen County DHS programs – data that is difficult to obtain without truly unique identification and which is essential for organizations requesting grants and funding from various state and federal agencies.

The BDMS helps DHS acquire funding for programs by providing a more detailed view of how people are using homeless services.

When the detailed, day-to-day service usage data in the BDMS is married to the identity and demographic information stored in the HMIS database, an expanded level of information and analysis is now possible. With a much more detailed picture of who is using which services and when, the DHS can better identify trends, such as increases in youth homelessness, or identify ways to better support people of a certain age group or gender based on the services they use most often.

This granular level of data has enabled the DHS to establish new programs that are more targeted to the needs of specific segments of the homeless population. The highly accurate data has also helped the County be more accountable to state and federal funding sources and to be more successful in winning grants that further support the DHS's homeless programs.

For example, when the data showed that women were coming back to the shelter more often and staying at the shelter longer than men, it was an indicator that different programs or solutions were needed to help women get back on their feet. Thanks to a grant, the County was able to do more research into homelessness among women and to identify what types of safety and support networks would help them the most.

The easy, web-based application enabled by FbF allows Bergen County DHS to save time and focus on priorities.

In this era of economic challenges and shrinking budgets, government agencies must find ways to serve more people with fewer resources. Because the Biometric Data Management System enables Bergen County DHS to streamline workflows

"Fulcrum has been a great partner to work with and the Fulcrum Biometric Framework has given us a tremendous amount of flexibility to customize our solutions to the needs of our clients. For the Bergen County BDMS, in addition to providing operational efficiencies, the system itself has required very few resources to maintain. The FbF bioServer, on which the Bergen County Biometric Data Management System operates, has maintained 99.99% uptime since the system came online in 2010."
– **Ray Bolling**, President of Eyemetric Identity Systems

and improve efficiencies in the delivery of services to the homeless population, DHS can effectively do more with less. By freeing up staff time that used to be spent on laborious data entry, personnel are now able to focus on more high-value tasks. This means DHS can help more people more efficiently and provide a higher quality of service.

Clients who are using the county's homeless services programs now have fast and easy access to a wide variety of services without worrying about providing ID or signing forms multiple times a day. Bergen County and the State of New Jersey now have a more accurate accounting of individuals receiving homeless services and DHS is now able to support more programs that help homeless individuals get back on their feet and out of the homeless management system.

ABOUT NEW JERSEY BUSINESS SYSTEMS/ EYEMETRIC IDENTITY SYSTEMS

New Jersey Business Systems Inc. (NJBS) has been providing technology solutions since 1968 and currently provides advanced security solutions and a variety of services to numerous government departments and agencies. Eyemetric Identity Systems was founded in 2004 to focus on the development of biometric-based identification systems. Eyemetric has successfully developed biometric solutions for government agencies, educational institutions and businesses looking to enhance identity management. Eyemetric's team of engineers works closely with management and security personnel to ensure that the identity solutions are integrated seamlessly into existing business processes. Eyemetric products and services include biometric-based entry access control systems, photo ID card management systems, customized visitor management solutions, web-based identification portals, portable/handheld biometric identification products and identity management solutions for homeland security, justice and public safety.

ABOUT FULCRUM BIOMETRICS

Founded in 2002, Fulcrum Biometrics is a leading provider, distributor and integrator of biometric identification technologies and devices. We work with commercial, civil, and military customers in more than 90 countries. Our offerings include industry-leading biometric software development tools and fingerprint and other biometric sensors. We are the globally trusted source for custom software development for multiple platforms, custom integration, implementation of identity management applications, and biometric access control systems. Fulcrum is the developer of the Fulcrum biometric Framework (FbF®), a rapid biometric application deployment suite which includes the FbF® bioServer, FbF® Live Scan, FbF® mobileOne, FbF® Demographica, FbF® bioClient, FbF® bioControls Client Library and FbF® mobileOne iOS Library.

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"We knew the system would help us do things more quickly, but what we didn't expect was how it has helped us better understand needs. Because of the data we've gathered, we have successfully written grants and developed programs we would not have thought of or been able to support otherwise, such as special services for homeless women and youth."
– **Mary Sunden,** Executive Director of Christ Church Community Development Corporation and administrator of the BDMS for the Bergen County Housing, Health and Human Services Center