

# Digital Transformation at the U.S. Census Bureau: Electronic Medical Mobile Application (EMMA)

## Digital Transformation Use Case

During the Decennial Census, the U.S. Census Bureau fields up to 500,000 field workers nationwide to collect household and demographic information by canvassing assigned areas, documenting, and reporting the results they find. The field work of Census Employees at times can have unfortunate circumstances, resulting in injury or property damage.

Reporting an incident and filing a workers compensation claim, or personal property and tort claim is a labor intensive and bureaucratic process taking an average of 72 hours just to complete the paperwork.

The information also must be shared within the Bureau's three internal offices including the General Counsel's office, and externally with the Department of Labor and the employee's medical professionals.

Restrictions based on Title 13 and Health Information Portability and Accountability Act (HIPPA) data, add additional layers of complexity.

## EMMA will Help Field Enumerators Get the Support They Need Faster, When They Have an Incident or Injury on the Job

The U.S. Census Bureau is leveraging emerging technologies including Artificial Intelligence (AI), Blockchain/Distributed Ledger Technology (DLT), Robotic Process Automation (RPA), and Virtual Assistants to synchronize its operations and data governance strategy to better support its employees. By leveraging modern technologies, the Census Bureau also hopes to recruit and field a new generation of technology-savvy employees.

## How EMMA Works

Leveraging the Census Bureau's smartphones and tablet computers, EMMA's automation will make it easier to complete incident reporting and claims filing processes including Workers' Compensation, Safety, and Personal Property and Tort (PP&T) within minutes versus 72 hours which they are experiencing today. All stakeholders receive status updates in real time.

As a result, the Census Bureau is digitally transforming three key agency functions: Customer Experience, Operational Processes, and Data Governance.

Moreover, the 2020 census relied on multiple IT systems. With EMMA, Census will be able to eliminate three legacy business systems.

To meet the Census Bureau's timelines for getting systems online in time for the 2030 census, the Bureau avoided a protracted procurement by leveraging the sole source authorities of the SBIR program. Forward Edge-AI, Inc, an SBIR company with SBIR derived Blockchain, ML/AI, and RPA technologies was selected.

EMMA is the Census Acquisition Team's first Phase III SBIR. By awarding the contract as a Phase III SBIR, Forward Edge-AI was under contract 1.5 business days after receiving the solicitation from the Acquisition Division. Using traditional methods would have taken months, even under best of circumstances.

Leveraging the smart contract feature of Blockchain/Distributed Ledger Technology to enforce the rules of information sharing within the Bureau and external offices, eliminates the potential for accidental disclosure, resulting in fines and penalties.

**Workers' Compensation Information Form**  
THIS FORM REQUIRES A NOTARY SEAL.

**AFFIDAVIT OF EXEMPTION**

The undersigned affirms that he/she is not required to provide workers' compensation insurance under the provisions of Pennsylvania's Workers' Compensation Law for one of the following reasons as indicated:

\_\_\_\_ Property owner is performing own work. If property owner does hire a contractor to perform any work pursuant to the building permit, contractor must provide proof of workers' compensation insurance to the municipality. Building owner assumes liability for contractor compliance with this requirement.

\_\_\_\_ Contractor has no employees. Contractor prohibited by law from employing any individual to perform work pursuant to this building permit unless contractor provides proof of insurance to the municipality.

\_\_\_\_ Religious exemption under Workers' Compensation Law. All employees of contractor are exempt from workers' compensation insurance. (Attach copies of religious exemption letters for all employees).

\_\_\_\_ Use this form when applicable to part "C" on the workers' compensation form.

Signature of Applicant: \_\_\_\_\_  
County of: \_\_\_\_\_  
Municipality of: \_\_\_\_\_

Subscribed, sworn to and acknowledged before me by the above  
(Printed name of applicant) This \_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_  
SEAL

\_\_\_\_\_  
Signature of Notary Public

MUST BE NOTARIZED

## SMART CONTRACT



PARTIES



SMART CONTRACT



EXECUTION



**U.S. Department of Commerce**  
U.S. CENSUS BUREAU  
[census.gov](http://census.gov)

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